

August 13, 2018

FORM C-AR: Annual Report

20/20 GeneSystems, Inc.

**ANNUAL REPORT FOR THE FISCAL YEAR ENDED
DECEMBER 31, 2017**

This Form C-AR (including the cover page and all exhibits attached hereto, the “Form C-AR”) is being furnished by 20/20 GeneSystems, Inc., a Delaware corporation (the “Company,” as well as references to “we,” “us,” or “our”) for the sole purpose of providing certain information about the Shares of Series A-2 Preferred Stock offered and sold by the Company pursuant to Regulation Crowdfunding under the Securities Act of 1933, as amended, for the fiscal year ended December 31, 2017. A copy of this report may be found on the company’s website at www.2020gene.com.

On December 29, 2017, we completed an initial closing in the offering of Securities described in the previously filed Form C and this Form C-AR (this “Offering”) in which we raised \$1,018,297 in gross proceeds through the sale of 312,361 shares of our Series A-2 Preferred Stock to 1,792 investors. On January 23, 2018, we completed a second and final closing in the Offering, in which we raised \$48,988 in gross proceeds through the sale of 15,027 shares of our Series A-2 Preferred Stock to 106 investors. As a result of this Offering, we received net proceeds of approximately \$1,000,000.

No federal or state securities commission or regulatory authority has passed upon the accuracy or adequacy of this document. No federal or state securities commission or regulatory authority has recommended or approved the securities. The U.S. Securities and Exchange Commission (“SEC”) does not pass upon the accuracy or completeness of any disclosure document or literature. The Company is filing this Form C-AR pursuant to Regulation CF (§ 227.100 et seq.) which requires that it must file a report with the Commission annually and post the report on its website at www.2020gene.com no later than 120 days after the end of each fiscal year covered by the report. The Company may terminate its reporting obligations in the future in accordance with Rule 202(b) of Regulation CF (§ 227.202(b)) by 1) being required to file reports under Section 13(a) or Section 15(d) of the Exchange Act of 1934, as amended, 2) filing at least one annual report pursuant to Regulation CF and having fewer than 300 holders of record, 3) filing annual reports for three years pursuant to Regulation CF and having assets equal to or less than \$10,000,000, 4) the repurchase of all the Securities sold in this Offering by the Company or another party, or 5) the liquidation or dissolution of the Company.

**THIS FORM C-AR DOES NOT CONSTITUTE AN OFFER TO PURCHASE OR SELL
SECURITIES.**

Forward Looking Statement Disclosure

This Form C-AR and any documents incorporated by reference herein or therein contain forward-looking statements and are subject to risks and uncertainties. All statements other than statements of historical fact or relating to present facts or current conditions included in this Form C-AR are forward-looking statements. Forward-looking statements give the Company's current reasonable expectations and projections relating to its financial condition, results of operations, plans, objectives, future performance and business. You can identify forward-looking statements by the fact that they do not relate strictly to historical or current facts. These statements may include words such as "anticipate," "estimate," "expect," "project," "plan," "intend," "believe," "may," "should," "can have," "likely" and other words and terms of similar meaning in connection with any discussion of the timing or nature of future operating or financial performance or other events.

The forward-looking statements contained in this Form C-AR and any documents incorporated by reference herein or therein are based on reasonable assumptions the Company has made in light of its industry experience, perceptions of historical trends, current conditions, expected future developments and other factors it believes are appropriate under the circumstances. As you read and consider this Form C-AR, you should understand that these statements are not guarantees of performance or results. They involve risks, uncertainties (many of which are beyond the Company's control) and assumptions. Although the Company believes that these forward-looking statements are based on reasonable assumptions, you should be aware that many factors could affect its actual operating and financial performance and cause its performance to differ materially from the performance anticipated in the forward-looking statements. Should one or more of these risks or uncertainties materialize, or should any of these assumptions prove incorrect or change, the Company's actual operating and financial performance may vary in material respects from the performance projected in these forward-looking statements.

Any forward-looking statement made by the Company in this Form C-AR or any documents incorporated by reference herein or therein speaks only as of the date of this Form C-AR. Factors or events that could cause our actual operating and financial performance to differ may emerge from time to time, and it is not possible for the Company to predict all of them. The Company undertakes no obligation to update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.

About this Form C-AR

You should rely only on the information contained in this Form C-AR. We have not authorized anyone to provide you with information different from that contained in this Form C-AR. We have sold Securities only in jurisdictions where offers and sales are permitted. You should assume that the information contained in this Form C-AR is accurate only as of the date of this Form C-AR, regardless of the time of delivery of this Form C-AR. Our business, financial condition, results of operations, and prospects may have changed since that date.

Statements contained herein as to the content of any agreements or other document are summaries and, therefore, are necessarily selective and incomplete and are qualified in their entirety by the actual agreements or other documents.

BUSINESS DESCRIPTION AND ANTICIPATED BUSINESS PLAN

20/20 GeneSystems, Inc. referred to herein as “20/20” or the “Company,” is a Delaware corporation, formed on September 28, 2000. The Company is currently also conducting business under the name of Genesys BioLabs. The Company is located at 9430 Key West Ave., Rockville, MD 20850. The Company’s website is www.2020gene.com. The information available on or through our website is not a part of this Form C-AR. The address of counsel to the issuer for copies of notices is BEVILACQUA PLLC, 1050 Connecticut Avenue, NW, Suite 500, Washington, DC 20036, Attention: Louis A. Bevilacqua, Esq.

We are an early-stage digital diagnostics company with the core mission of reducing cancer mortality in the U.S. and around the world through early detection. To do so, we use machine learning and big data analytics approaches to substantially improve the accuracy of tumor biomarkers that are currently tested in millions of individuals around the world. Our products include a blood test for early lung cancer (www.BloodTestforLungCancer.com) and a multi-cancer test for screening at least five cancers from one blood sample, which is in late stage development (www.OneTestforCancer.com). Our legacy businesses include a patented field test kit for screening suspicious powders for bioterror agents that is used by hundreds of first responder organizations worldwide (www.BioCheckInfo.com).

Our Markets & Unique Technical Approach for Addressing those Markets

The survival rate for the deadliest cancers is closely linked to stage at time of diagnosis. With lung cancer, for example, some studies show a five-year survival rate approaching 90% for screen detected Stage 1 cancers. That survival plummets to below 5% percent for metastatic cancers first diagnosed in Stage 4 (Henschke, et al. “Survival of patient with Stage 1 Lung Cancer Detected on CT Screening,” *N. Engl. J. Med.* 355 (2006)). For these reasons in certain regions of the world, especially East Asia, an aggressive cancer screening posture is commonplace. Millions of individuals in Japan, Korea, and China undertake 3-5 hour “health checks” each year that usually include blood tests for an array of cancers. Typically, these blood tests measure the levels of between 3 to 8 tumor antigens, proteins secreted by tumors that can be detected using antibodies. Large scale studies by our collaborators in Taiwan demonstrate that these tests are useful for detecting even early stage cancers (Y.-H. We et al., “Cancer screening through a multi-analyte serum biomarker panel during health check-up examinations: Results from a 12-year experience,” *Clinica Chimica Acta* 450 (2015)). However, using the approach that we have pioneered, this screening approach can be rendered significantly more accurate using machine learning algorithms that integrate clinical factors (e.g. age, gender, smoking history, etc.) with the biomarker levels. Incorporation of changes to the levels of these biomarkers over time has also been shown to improve diagnostic accuracy and usefulness.

In short, our unique technical approach involves the following three elements: (i) obtain “real-world” data from tens of thousands of apparently healthy individuals (i.e. no apparent signs of symptoms of cancer) who are screened for cancer using blood tests that are routine in certain parts of the world (e.g. East Asia), (ii) use this data to build machine learning algorithms that improve the accuracy of those tests by integrating clinical factors (age, gender, etc.), and (iii) introduce those tests in other parts of the world where this testing approach is less common while providing studies to evaluate and account for any variability across patient populations. We are unaware of any other companies that have adopted this approach.

According to MarketsandMarkets, the global cancer diagnostics market was valued at \$7.1 billion in 2015 and is projected to reach \$13.1 billion by the year 2020, increasing at a compound annual growth rate, or CAGR, of 12.9% during this period.

Our solutions historically focused on lung cancer, which is the third most common cancer and the leading cause of cancer deaths among both men and women, according to the American Cancer Society. According to Grand View Research, the global lung cancer diagnostics market is forecasted to grow to \$3.64 billion by 2024 from an estimated \$1.63 billion in 2015. While the North American market generated the most revenue in 2015 (~\$520 million), the Asia Pacific market has the largest projected growth rate at a CAGR of 9.5% from 2013 to 2024.

More recently, we have prioritized the development and commercialization of a “pan” cancer test (i.e. screening for several cancers from one blood sample). This test has a substantially larger market than any single cancer test. According to Grand View Research, in 2015, the global blood testing market was valued at \$51.5 billion and is expected to reach \$62.9 billion by 2024. Regionally, North America held the dominant market share with over 40% of total revenue in 2015 and the Asia Pacific market is expected to grow rapidly due to rising awareness of necessary diagnostic needs and technologies, according to Grand View Research.

Biomarkers are biological molecules obtained from blood, tissue, or other body fluids that are used to test for diseases or conditions. The global biomarkers market was worth \$27.95 billion in 2016 and is anticipated to grow at a CAGR of 13.8% to reach \$53.34 billion in 2021, according to MarketsandMarkets. Biomarker development is driven by increased diagnostic applications and research funding as well as by the rising prevalence of cancers. If categorized by diseases and disorders, cancer leads with the largest biomarkers market share in 2016. According to Grand View Research, the global cancer biomarkers market was valued at \$10.3 billion in 2016 and is expected to reach \$33.7 billion by 2025, growing at a CAGR of 14.3%.

Our Products

PAULA’s Test+™ (www.BloodTestforLungCancer.com) is a blood test and algorithm to aid in the early detection of lung cancer. We believe that it is among the first combinatorial blood tests for the early detection of lung cancer that incorporates a machine learning algorithm that factors in clinical parameters (age, gender, smoking history) together with biomarker values. In the U.S., we introduced PAULA’s Test+™, a CLIA (Clinical Laboratory Improvement Amendments) licensed lab and lung cancer test that has incorporated a new machine learning algorithm recently co-developed and validated by the Cleveland Clinic.

For China and East Asia, we developed software with an algorithm to substantially improve the accuracy of lung cancer screening already common in that region. The algorithm was developed using data from over 1,000 Chinese patients who have one or more ambiguous pulmonary nodules (i.e. not determined to be either benign or malignant) as determined by CT scan.

We are working to follow this product with OneTest™ a universal multi-cancer test and algorithm to screen for multiple cancer types from one blood sample, which is in late stage development. The test is based on data from over 40,000 individuals tested with the seven-biomarker panel over a 12-year period. Importantly, our combinatorial algorithms and analytics substantially improve the accuracy of cancer tests currently used by physicians, hospitals, clinical labs, and health check centers in many parts of the world -- without requiring new equipment or change in diagnostic testing practice. The

algorithm combines the levels of protein biomarkers -- like CEA, AFP, PSA, and the like with patient information (e.g. age, gender, smoking history, etc.). We report patient risk of having 5 or more cancers (liver, lung, pancreas, and the like) and recommend follow-up testing with the objective of finding early tumors that can be surgically removed before they become fatal. OneTest™ is modeled on the testing approach very common in East Asia where millions of healthy individuals receive yearly cancer blood test as part of annual health check-ups.

Our other products and technologies include BioCheck®, a patented test kit for screening suspicious powders that is used by hundreds of first responder organizations in the U.S. and overseas. We also own a patented technology for tumor profiling with later stage cancers (prostate, kidney) to select optimum treatment regimens. Those products can be licensed or spun off or otherwise advanced to create additional shareholder value.

Our Commercial Approach

Our current commercial model, somewhat unique in the diagnostics industry, is to build and provide a software analytics layer on top of assays that mainly comprise approved and widely used biomarker detection kits and instrumentation. With this approach, hundreds of medical testing laboratories worldwide can quickly adopt and implement our tests with minimal barriers since they can use their already installed base of established tumor marker detection kits and automated instruments available from companies like Roche Diagnostics, Abbott Diagnostics, and Siemens Diagnostics, thereby permitting us to scale globally. Each of these testing laboratories can provide and promote the tests and algorithms to healthcare practitioners and organizations in their network. We are presently unaware of any other company that has commercialized products for early cancer detection in the U.S. using this model.

In the U.S., we have adopted both Business-to-Business, or B2B, and Business-to-Consumer, or B2C, commercial / sales models. The B2B model involves partnerships with smaller clinical testing labs such as those that are owned by or affiliated with primary care practitioner, or PCP, groups. With this model, the PCP offers our tests to their patients, collects the fee, runs the tests in their labs, and accesses our cloud based algorithms on a pay-per-test basis. This structure provides a substantial financial incentive for the PCP to drive test volume while providing a unique service to their patients that parallels but improves upon testing practices untaken by millions of individuals outside the U.S.

Our B2C model involves direct-to-consumer engagement. Individuals interested in our tests can order them from our website and then receive a prescription either from their own PCP or from a telemedicine service provider that we direct them to (we always recommend consumers to receive and interpret test results only through a physician or other qualified medical practitioner). The prescription would then be taken to a national clinical laboratory chain (e.g., Quest Diagnostics, LabCorp, BioReference Labs, etc.) where they will have a blood sample taken and the biomarker tests will be run. The biomarker values will be reported back to us, to be entered into our algorithms and to produce a report with the various cancer risk scores, etc.

Overseas our commercialization models will vary and will be implemented by our marketing partners in each country. One such marketing partnership is already in place (My-BioMed in China), and several others are pending. We have received interest from a number of large software and diagnostics companies that are actively seeking to make near-term alliances with, and acquisitions of, companies at the intersection of healthcare and artificial intelligence. A marketing partnership in China will result in

revenue from that country, home to the world's largest population of smokers, with large streams of clinical data that will enhance our proprietary database and support growth of the US market as well.

Our Competition

Because of the substantial unmet medical need worldwide, many companies (and associated academic partners) are actively seeking to develop and commercialize tests of various types to detect cancers early, when it can be treated most effectively. Current approaches include *in-vivo* radiographic imaging as well as *in-vitro* tests using diverse bodily tissues and fluids including blood (serum or whole blood), urine, saliva, stool, sputum, and exhaled breath.

With regard to lung cancer, a longstanding focus of our company, key competitors include OncoImmune, Ltd. and OncoCyte, Corp.

While we are unaware of any widely utilized products that currently compete with our proposed OneTest™ multi (pan) cancer test, there are many emerging companies seeking to use “liquid biopsy” and “next-gen sequencing” for pan-cancer testing. Furthermore, many companies are actively utilizing AI and machine learning to improve health outcomes, and at least some of those companies are likely seeking to use these techniques to improve cancer screening blood tests. Examples of companies working on pan-cancer tests include Grail, Freenome and Personal Genome Diagnostics.

We believe we may be the first and only company to have a market ready pan-cancer blood test that meets each of the following criteria:

- Aids in the early detection of four or more cancers, especially deadly cancers such as those of the lung, liver, and pancreas for which there are no widely used screening tools in the U.S.;
- Includes machine learning algorithms powered by data from over 28,000 individuals, the majority of whom were tested before being diagnosed with cancer (it is very important to show that a test is useful to screen asymptomatic individuals vs. monitoring those who have confirmed cancer);
- Externally validated using an independent sample set; and
- Reasonably expected to be offered for under \$300 over the next few years (this price point is important since these tests will not likely be covered by insurance for many years to come).

We believe that we are among the first companies to develop and bring to market in the U.S. and China, machine learning algorithms developed from and used with standard biomarker tests run in thousands of Health Check Centers in East Asia and around the world. Accumulation of high-quality data to build these algorithms was a multi-year effort, thereby creating a substantial barrier to entry. As a first mover, serial data we collect from individuals who use our test will be fed back into the machine learning algorithm resulting in further accuracy improvement. Thus, we expect to remain ahead of emerging competitors in terms of continuously learning and improving test performance.

Our Competitive Advantages

Based on our management's belief and experience in the industry, the following competitive strengths should enable us to compete effectively in and capitalize on the growing cancer diagnostic market.

- *Our pan-cancer test and algorithm are based on data from a pre-symptomatic patient population and therefore should translate well into a real-world screening population.* The

reported diagnostic accuracy of our tests—typically quantified as a function of clinical sensitivity and specificity—are generally comparable to those reported by our aforementioned competitors. However, unlike our known competitors, the data supporting our pan-cancer and lung nodule products were generated from tens of thousands of individuals undergoing yearly screenings in “real world” patient settings where blood samples were taken and analyzed before the cancer diagnosis. In contrast, competing products were developed in a laboratory setting involving blood samples from individuals after they presented with symptoms of cancer when it has often advanced to a later stage.

- ***Our tests are designed to be compatible with existing systems.*** Our tests are designed to be compatible with standard instrument systems manufactured and distributed by companies such as Roche Diagnostics, Abbott Diagnostics, and Siemens Healthcare. We believe that this dramatically lowers the barriers to adoption by hundreds of clinical diagnostics laboratories worldwide.
- ***Our tests are more affordable compared to DNA based liquid biopsies.*** We project that the average selling price of OneTest™ will be \$189 and the average selling price of PAULAs test+™ about \$149. In contrast tests that incorporate next gen sequencing of cell-free DNA will likely cost an average of \$500 or more for the next several years.
- ***Cancer screening options in the U.S. are limited to only a few types of cancers.*** Widespread cancer screening in the U.S. is limited to only colorectal, breast, prostate, cervical and lung (for those at highest risk). Our test offers additional early detection options for other commonly diagnosed cancers such as pancreatic and liver, where few if any low cost, easily accessible screening option exists today.

Our Growth Strategy

We will strive to be a leading cancer diagnostic company by pursuing the following growth strategies:

- ***Scaling through partnerships with medical practitioners, retail clinics, and national lab chains.*** Because our algorithms are designed to be used with standard instruments, we will seek to partner with labs, both large national chains as well as smaller regional and office-based labs. We can offer our tests in the U.S. and in foreign markets who wish to offer our tests to their customers if they obtain the instruments and kits from Roche, Abbott, or Siemens diagnostics. In the future, we expect our tests to become available at pharmacy chains and walk-in clinics that have on-site blood sample collection capabilities and trained healthcare practitioners to educate consumers.
- ***Health conscious consumers are willing to pay an average of up to \$200 for cancer detection blood tests.*** Our market research and pre-commercial pilots suggest that a substantial and growing segment of the wellness market is willing to pay an average of about \$200 for early cancer screening blood tests if it helps to reduce the risk of advanced, lethal cancers. We have therefore adopted a consumer-initiated model where interested individuals request the test from a physician of their choice. We have no immediate plans for a pure direct-to-consumer model that avoids physicians entirely.

INTELLECTUAL PROPERTY

We own or license 10 patent families related to cancer diagnostics and biowarfare detection. As of December 31, 2017, there are 15 granted patents and 10 pending applications in the US and various other jurisdictions, including Canada. The earliest patent family has a projected expiration date of

2020. Other family patents are expected to expire through 2037 based on priority date and projected expiration for pending applications or granted patents included in each family. No assurance is made that any pending patent applications within the portfolio will result in a granted patent.

REGULATION

Based on advice of regulatory counsel, we believe that our products will not likely require pre-market approval from the U.S. Food and Drug Administration, or FDA, or its counterparts in other countries that we plan to do business. In the U.S., our products fall into one of two categories: Laboratory Developed Tests, or LDTs, or Clinical Decisions Support Software, or CDSS. However, at least in the U.S., there has been some uncertainty as to the extent to which FDA may seek to regulate LDTs and CDSS. Thus, we cannot rule out the possibility that the FDA may take an alternative view and seek to regulate our products. For these reasons in providing our tests to the public we plan to acquire and retain real-world evidence and data of outcomes and efficacy that could be used to support any future regulatory applications and submissions that may become mandated.

Laboratory Developed Tests. LDTs are tests run in the laboratory of the company that developed them. PAULA's Test+™ is currently an LDT. LDTs are not regulated by the FDA but rather under a different regulatory regime called CLIA (Clinical Laboratory Improvement Amendments). In September 2017, following an inspection by government authorities, our CLIA license was renewed for another two-year term.

CDSS. On December 13, 2016, the 21st Century Cures Act was signed into law. Among the many provisions of the Cures Act was the exclusion of certain medical decision support software from the FDA's jurisdiction. However, in June 2017, the Trump Administration's new FDA Commissioner Scott Gottlieb, M.D., who is widely deemed to have a more moderate view of regulation than his recent predecessors, issued a new Digital Health Innovation Plan with the goal of "giving entrepreneurs more opportunities to develop products that can benefit people's lives." A key feature of the plan is a novel, post-market approach to regulation of digital medical devices (i.e. let the devices enter the market before the FDA approves them and then assess how they perform in the real-world). On December 8, 2017, the FDA issued its first set of Draft Guidance to implement those provisions of the Cures Act relating to CDSS.

Operating under the assumption that seeking FDA approval for our products is optional but that approval could improve the adoption rates and eventual insurance coverage decisions, our strategy is to seek FDA approval before the end of 2019. In so doing, we will present to the FDA Real World Evidence, or RWE, data from tens of thousands of individuals tested with its products in the U.S. and overseas. On August 31, 2017, the FDA issued Guidance on the "Use of Real-World Evidence to Support Regulatory Decision-Making for Medical Devices." The Guidance provides that "in some cases, a 'traditional' clinical trial may be impractical or excessively challenging to conduct" and that use of RWD "may in some cases provide similar information with comparable or even superior characteristics to information collected and analyzed through a traditional clinical trial."

LEGAL PROCEEDINGS

From time to time, we may become involved in various lawsuits and legal proceedings which arise in the ordinary course of business. However, litigation is subject to inherent uncertainties, and an adverse result in these or other matters may arise from time to time that may harm our business. We are

currently not aware of any such legal proceedings or claims that we believe will have a material adverse effect on our business, financial condition or operating results.

DIRECTORS, OFFICERS AND EMPLOYEES

The directors and officers of the Company are listed below along with all positions and offices held at the Company and their principal occupation and employment responsibilities for the past three (3) years and their educational background and qualifications.

John Compton, Ph.D. has served as Chairman of the Board since July 2016. Mr. Compton has over 30 years of experience in the development and application of molecular biological techniques to answer questions about genetics and epidermal differentiation, and has authored more than 80 publications in the field. Mr. Compton served as Vice-President of BioReference Laboratories from 2007 to 2013. Previously, Mr. Compton was founder, and served as Scientific Director and Co-President of GeneDx Inc., from 2000 to 2006, the assets of which were acquired by BioReference Laboratories (now part of Opko) in September 2006. GeneDx is a world leader in diagnostic genetic testing with an acknowledged expertise in rare and ultra-rare genetic disorders, as well as one of the broadest menus of sequencing services available among commercial laboratories. Mr. Compton holds B.S. degrees in Physics and Biology from MIT, received his Ph.D. from the University of California, Berkeley in Biophysics, and did his post-doctoral training in protein-DNA interactions at the Baylor College of Medicine. He was a Staff Scientist at the National Institutes of Health, Bethesda, from 1991-2000. In 2003, he was awarded the Entrepreneur of the Year award by the Technology Council of Maryland.

Jonathan Cohen is the founder of our company and has served as Chief Executive Officer, President and a Director since its inception in August 2000. Under his leadership, our company has brought in over \$15 million in total equity and grant funding and launched two successful products. Active in public policy initiatives on behalf of the biotechnology industry, Mr. Cohen conceived of and helped bring about the passage of the Maryland Biotechnology Investment Tax Credit, which we believe is widely deemed to be the most effective investment incentive in the U.S. for early stage biotech companies. He has testified before several Congressional committees and is the architect of the Innovative Technologies Investment Incentive Act, which was introduced by Rep. Chris Van Hollen in 2011. Mr. Cohen is a founding director of the Small Biotechnology Business Coalition. Before founding our company, Mr. Cohen was patent and general counsel for two publicly traded companies: Ventana Medical Systems Inc. (acquired by Roche diagnostics in 2008), from 1999 to 2000, and Oncor Inc. from 1997 to 1999). Mr. Cohen is a registered patent attorney with more than 18 years of experience in biotechnology patents and licensing matters. Mr. Cohen has a Master of Science Degree in Biotechnology from Johns Hopkins University and a law degree from the American University.

Richard M. Cohen, CPA has served as a member of our board of directors since July 2016. Mr. Cohen is an experienced CEO/CFO at public and private companies. His professional experience includes biotech, financial services and diversified media and he maintains excellent contacts with capital financing sources on and off Wall Street. From 2013 to present Mr. Cohen has been President of Richard M. Cohen Consultants. He was the CEO, CFO, and Board Member of CorMedix Inc., Bridgewater, NJ, a publicly traded (NYSE) medical device/biotechnology company with intrapericardial therapy product targeted to markets in the U.S. and Europe, from 2010 to 2013. He has served on the board of directors and as Audit Committee Chair of Helix BioMedix, Inc. (2006 to Present), CorMedix Inc. (2010 to 2013), and Rodman & Renshaw (2008 to 2012). Mr. Cohen's academic credentials include an MBA, Stanford University 1975, BS with honors, Wharton School, University of Pennsylvania. Mr. Cohen has no relation to CEO Jonathan Cohen.

Jayson Lee has served as a member of our board of directors since July 2016. Mr. Lee has served as an Executive Director at Ping An Ventures, a 10% shareholder of our company, since 2016. Ping An Ventures is the investment arm of Ping An, one of the largest health and life insurance companies in China. At Ping An Ventures, Mr. Lee focuses on direct investment in the healthcare sector with an emphasis on Series B to pre-IPO companies. Previously, Mr. Lee was Executive Director at BE Capital (Beijing China) from 2014 to 2016, where he also focused on healthcare investments and he served at the China Development Investment Bank from 2009 to 2014. Mr. Lee has his MBA degree from National Chengchi University in Taiwan and studied in Norges Handelshøyskole (NHH).

John W. Rollins has served as a member of our board of directors since November 2017. He is an active investor with the Keiretsu Forum and other Angel investor organizations. Since 2014 Rollins has served on multiple Boards and Chairs the board of directors of the MedStar Southern Maryland Hospital Center (2014 to present). From 2001 to 2010 he taught Entrepreneurship at the George Washington University School of Business and founded the GW New Venture Competition and served as its Director from 2007 to 2014. In 2003 Rollins founded StreamCenter, Inc., a firm that pioneered online education using video streaming, and served as Chair of the board of directors from 2003 to 2008 and CEO from 2008 to 2010. Prior to 2001, he founded and served for three decades as the CEO and Chairman of AZTECH Software Corporation (Bethesda, MD), the nation's first specialized provider of information technology services to non-profit organizations. Mr. Rollins's Board experience has included serving as Trustee of the National Park Trust (Vice Chair and Treasurer) (1990 to present), Director of the MedStar Georgetown University Hospital (Vice Chair) (2002 to 2013), the Washington Hospital Center (Vice Chair and Treasurer) (1977 to 2002), and the U.S. Association for Small Business & Entrepreneurship (2004 to 2006). Mr. Rollins earned his AB in Mathematics from Dartmouth and his MBA in Finance from the Stanford University Graduate School of Business.

Michael A. Ross, M.D. has served as a member of our board of directors since July 2016. Dr. Ross has served as the Chairman and CEO of Euclid Systems Corporation (Herndon, VA) since 2015, where he led the growth of this ophthalmic medical device company from \$3.1 million to over \$20 Million in 5 years. The bulk of Euclid's sales are in China and East Asia where Michael visits 4-5 times per year. Prior to joining Euclid, he was CEO of E-P Therapeutics from 2010 to 2012, and was a Medical and Scientific Advisor to StemCyte, Inc. 2009 to 2010. He is Board-certified in Obstetrics and Gynecology, he was a founding member of a OB-GYN-Infertility practice in Northern Virginia from 1980 to 2007. Dr. Ross has been a Clinical Professor of Obstetrics and Gynecology, George Washington University Medical Center since 1979 and has served on the Boards of Directors of several biotech and medical device companies. He has a BS in Chemistry and Biology from Dickinson College and an MD from George Washington University.

He Shen has served as a member of our board of directors since July 2016. Mr. Shen has 20 years of investment banking experiences in New York and London, with expertise in private equity, structured capital markets, regulatory capital, corporate finance and derivatives. Since 2016, Mr. Shen has been the international CFO for BlueFocus Communications Group, which is the largest marketing holding company listed in China. Mr. Shen has also been actively involved in Keiretsu Forum, one of the world's largest angel investor networks, and has invested in over 20 companies ranging from consumer products to software and biotechnologies over the past few years. Until 2015, Mr. Shen spent 10 years at Lloyds Banking Group where he co-headed Strategic Transactions Group. Prior to joining Lloyds Banking Group, Mr. Shen worked in the Global New Product Development Group of Merrill Lynch from 1996 to 2000 and from 2003 to 2005 where he originated and developed cross border enhanced yield investment products for financial institutions globally. Additionally, Mr. Shen worked

in the Structured Products Group of Donaldson Lufkin & Jenrette / Credit Suisse from 2000 to 2003, where he was focused on product development, origination and execution of innovative debt and equity financing structures for investment banking clients. Mr. Shen is fluent in Chinese and English, and has the CFA qualification, a B.S. in Electrical Engineering and a B.A. in Economics and Business from Lafayette College.

Directors are elected until their successors are duly elected and qualified.

Mr. Lee was elected by the holders of our Series A-1 Preferred Stock and Mr. Rollins was elected by the holders of our Series A Preferred Stock. Except for the rights of such holders to elect a director, which will expire upon conversion of such shares, there are no agreements or understandings for any of our executive officers or directors to resign at the request of another person and no officer or director is acting on behalf of nor will any of them act at the direction of any other person.

There are no family relationships between any director, executive officer, person nominated or chosen to become a director or executive officer or any significant employee.

To the best of our knowledge, none of our directors or executive officers has, during the past five years:

- been convicted in a criminal proceeding (excluding traffic violations and other minor offences); or
- had any petition under the federal bankruptcy laws or any state insolvency law was filed by or against, or a receiver, fiscal agent or similar officer was appointed by a court for the business or property of such person, or any partnership in which he was general partner at or within two years before the time of such filing, or any corporation or business association of which he was an executive officer at or within two years before the time of such filing.

Indemnification

Delaware law authorizes corporations to limit or eliminate (with a few exceptions) the personal liability of directors to corporations and their stockholders for monetary damages for breaches of directors' fiduciary duties as directors. Our certificate of incorporation and bylaws include provisions that eliminate, to the extent allowable under Delaware law, the personal liability of directors or officers for monetary damages for actions taken as a director or officer, as the case may be. Our certificate of incorporation and bylaws also provide that we must indemnify and advance reasonable expenses to our directors and officers to the fullest extent permitted by Delaware law. We are also expressly authorized to carry directors' and officers' insurance for our directors, officers, employees and agents for some liabilities. We currently maintain directors' and officers' insurance covering certain liabilities that may be incurred by directors and officers in the performance of their duties.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duty. These provisions may also have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. In addition, your investment may be adversely affected to the extent that, in a class action or direct suit, we pay the costs of settlement and damage awards against directors and officers pursuant to the indemnification provisions in our amended and restated certificate of incorporation and bylaws.