annual report 2022

VTC | TECHNOLOGY™ VENTURE DEVELOPMENT

Executive Summary

Introduction

In 2022, VIC Tech made great strides. Progress included several of our portfolio companies reaching major commercialization milestones. Portfolio companies had large company strategic partner investments, built out teams with world-recognized key opinion leaders, and acquired new equity investments and non-dilutive funding.

We continued to expand the VIC team across the country with exceptional new talent and life science expertise added to our Board of Directors and Medical Advisory Board. Our third class of VIC Fellows were brought on representing a diverse group of talented individuals including MD's, scientists, and life science executives. We had a partial exit in one of our portfolio companies where we sold our seed round shares at a 5.6x multiple, while still retaining our much higher number of founder's shares for a larger exit expected in the not-too-distant future.

Most of our portfolio companies saw strong progress, including new pre-clinical and clinical milestones reached, products released to market, and more. Appendix A provides the VIC financial summary. Appendix B contains more detailed updates on the progress of each portfolio company. The Appendices are confidential and are only available to VIC stakeholders. However, in this Executive Summary, we provide a high-level overview, and highlight a few of the noteworthy developments in 2022.

Mission

Form and grow life science companies that shape the future by bringing innovative discoveries from research labs to commercial deployment.

Albuquerque, NM | Boulder, CO | Dallas, TX
Fayetteville, AR (headquarters) | Minneapolis, MN

victech.com I vicnetwork.com I vicfoundry.com

Board of Directors:

Chairman: Calvin Goforth | Jerry Adams | Fenel Eloi
Ajay Gupta | James Hendren | Laura Lyons | Chantell Preston

AKESO BIOMEDICAL
BiologicsMD
cardiowise
CELLIA SCIENCE
calyxo
Filtravate
NEUREXIS therapeutics
nob·hill THERAPEUTICS
OsteoVantage
sfc fluidics
solaris VACCINES
Solenic Medical
Tesseract Structural Innovations, Inc.
VIXIAR
zebra ANALYTIX

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Michael Artinger
Executive VP
& Managing Dir.

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Managing
Director

Ralph Henry
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Robyn Goforth
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VP Operations

Jim Terrell
Controller

Sierra Bergsgaard
Marcom Manager

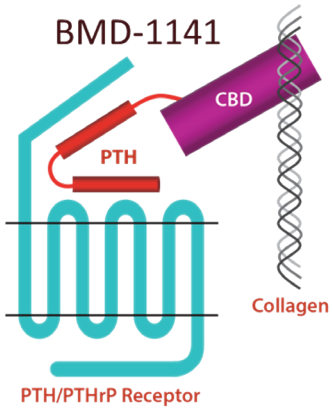
Kelly Mabry
Executive in Residence

2022

Portfolio Companies Progress Highlights

Therapeutics Portfolio

BiologicsMD successfully completed the last in a series of additional de-risking studies focused on the efficacy and safety of its BMD-1141 biologic drug for the treatment of alopecia areata. Results from this most recent de-risking work further confirms the superior efficacy of BMD-1141 compared to an immunosuppressive JAK inhibitor, as well as supports the mechanism of action of BMD-1141 as a first-in-class hair cycle stimulator. Next up is Phase I human trials. The company also expanded its team including recruiting Brett King, MD, PhD, Associate Professor of Dermatology at Yale School of Medicine, as Senior Scientific Advisor. Dr. King is currently the foremost expert in drug development for alopecia areata and the lead author in the NEJM study for Eli Lilly's Olumiant®.



BMD-1141 is BiologicMD's lead compound. The company is developing a family of compounds that provide powerful stimulatory effects directly to the target receptors at the point of disease.

Neurexis Therapeutics continues to make strong progress. The company's lead product is a neuroprotective peptide (tatCN19o) which has demonstrated excellent efficacy and safety preventing brain cell death in both small and large animal models of ischemia. Significant headway in IND-enabling research has been achieved including additional efficacy, pharmacokinetics, manufacturing, and stability. For example, studies performed by our CRO in a rat model of ischemic stroke, indicate improved functional outcomes following treatment with tatCN19o at 0.5 mg/kg, a 15x lower dose than a clinical stage competitor.

Neurexis Therapeutics lead product is a neuroprotective peptide to prevent brain damage following focal (stroke) and global (cardiac arrest) ischemia.

In 2022, **Nob Hill Therapeutics** received a $1.75M NIH grant for the development of the company's first therapy product using Nob Hill's novel DryNeb™ inhaled drug delivery technology platform. DryNeb allows deep lung delivery at much higher dosages compared to current alternatives, resulting in more effective treatments for many lung-related diseases (e.g., lung infections, lung cancer). Ongoing testing of the DryNeb clinical prototype has provided outstanding results to date and will enable partnerships and FDA engagement. The company is already engaged in several key strategic partnership discussions for investment and collaboration. Nob Hill added tremendous additional expertise to team with the hiring of inhaled therapy industry veterans Noel Greenberger (CEO) and Craig Davies-Cutting (VP, R&D). The company also received recognition as an Albuquerque Business First/New Mexico Inno "Startups to Watch" and Medtech Outlook "Top Drug Delivery Solutions Provider 2022".

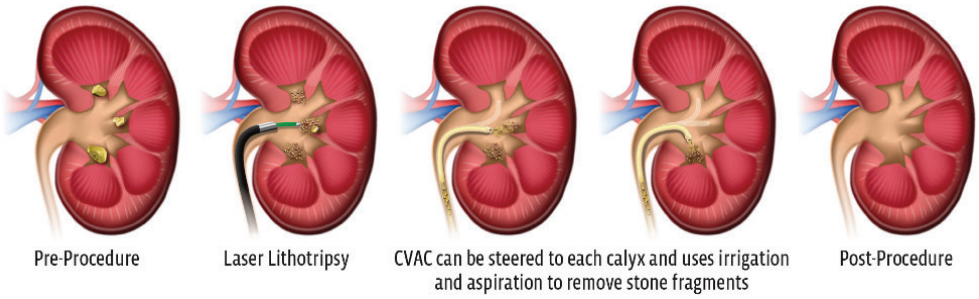
DryNeb™ Clinical Prototype

Even with recent advances, there remains a substantial unmet need for better approaches to creating new vaccines. **Solaris Vaccines** is developing an innovative method trademarked as SolaVAX™ which uses the combination of a photosensitizer (riboflavin/vitamin B2) and UV light to generate whole, inactivated vaccines. Substantive progress in an NIAID-funded $18M SARS-CoV-2 vaccine program at Colorado State University has been made, including a successful NIH-sponsored pre-IND meeting with the FDA, optimization of vaccine production, pivotal animal studies, and a recent annual program update at NIAID.

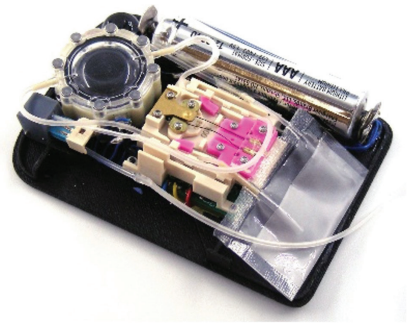
Medical Devices Portfolio

In 2022, **Calyxo** closed $32.7M in Series C financing led by Questa Capital and CRG. The company has assembled a team of experienced, disruptive-technology sales managers to methodically expand the launch of its novel medical kidney stone removal tool known as CVAC™. Customer response has been enthusiastic – urologists are excited to have vacuum technology to achieve more stone-free outcomes. The company's multi-center, prospective, randomized, post-market ASPIRE study is underway. ASPIRE will compare the clinical outcome of using Calyxo's CVAC system in SURE (Steerable Ureteroscopic Renal Evacuation) procedures vs. standard ureteroscopy using highly sensitive CT cut (1.25 mm), a highly rigorous outcomes measurement at 30-days post-op. ASPIRE will be the first prospective, , randomized study to highlight the clinically relevant outcomes measurements of stone clearance rate and residual stone burden, as well as stone free rate.

We expect ASPIRE to set a new standard in how clinical outcomes are measured following kidney stone procedures. The ASPIRE data will be used to further support market adoption and commercial insurance coverage.



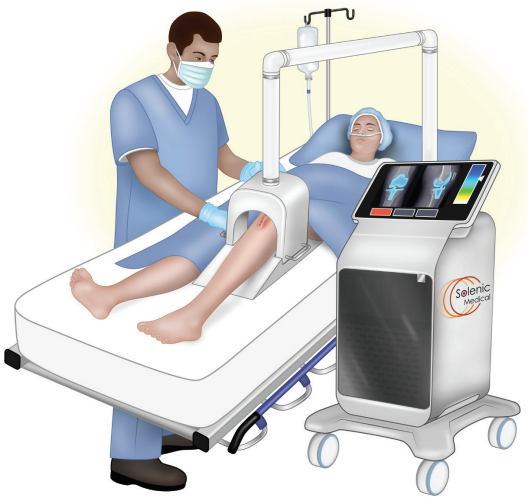
In 2022, **SFC Fluidics** has been working toward a Series C investment to be able complete the development of its PANDA insulin delivery pod development, receiving FDA 510(k) clearance through the “fast track” Breakthrough Device Designation pathway, and conducting human clinical studies. Aside from investment discussions, SFC is also pursuing two co-development projects with strategic companies in the diabetes space. One involves a potential partnership with a concentrated insulin developer to conduct human clinical testing. The objective is to work out the go-to-market applications for the PANDA pod well in advance of regulatory clearance. Significant progress was made in 2022 in optimizing the various components and with the overall assembly process. Manufacture and assembly of the ePump hardware including fluid fill can be scaled up for automated high-volume production. Progress included:



Internal components of commercial prototype Panda drug delivery pod.

- Initial printed circuit board design for the Panda system completed
- Third generation of the Dispense Confirmation Sensor integrated
- Tubing design and battery system optimized for Panda layout

Solenic Medical made outstanding progress in 2022. Large animal trials using the company’s novel device for preventing or treating bacterial infections on medical implants continued to go exceptionally well. The efficacy trials are complete, safety trials are ongoing, and the definitive GLP studies will begin soon. At the end of November, the company’s first patent issued. This was followed by a $4M first closing of a Series A investment round led by Johnson & Johnson Development Corporation syndicated with ShangBay Capital in mid-December. Series A will take the company into human clinical trials.

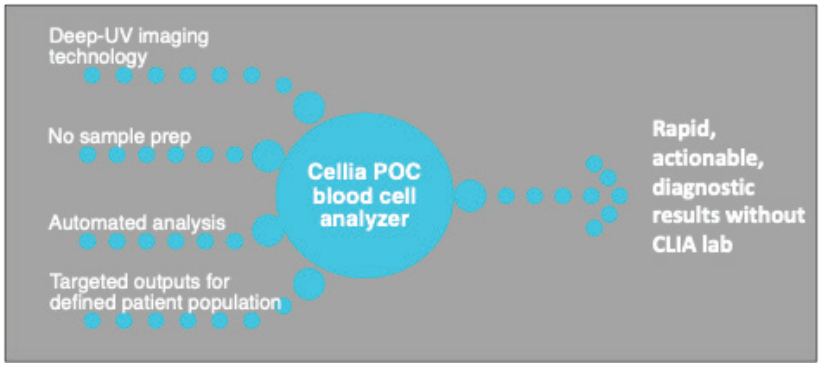


Diagnostics Portfolio

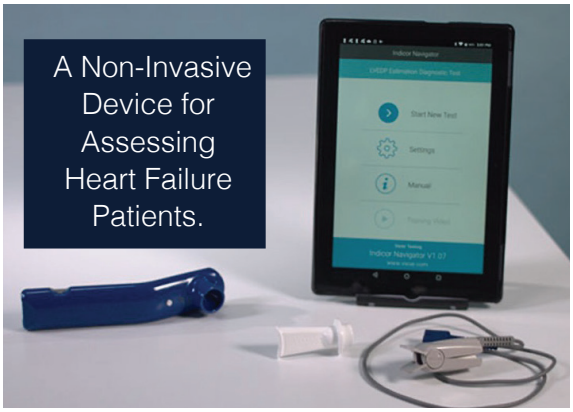
In preparation for going to market with its FDA cleared machine learning-based software for heart health analysis, **CardioWise** has been working with GE Healthcare’s (GEHC) online sales portal, called the Edison Marketplace. Notably, the company was also chosen out of hundreds of applicants to be one of only six companies to participate in the inaugural Edison Commercialization Program. The primary activity of this accelerator was to onboard the CardioWise SQuEEZ™ software onto the GE platform and perform verification and validation testing. CardioWise will be using the GEHC support systems and resources available through the channel partnership to gain entry to both the US and EU markets. In parallel, CardioWise is building its own service and support programs to provide assistance to GEHC and other channel partners for commercialization.

In November 2022, CardioWise CTO Geoffrey Dalbow (at far right) participated in a panel discussion in the GE Healthcare booth at the Radiological Society of North America, the largest medical imaging professional meeting in the world, with over 40,000 people attending. GE Healthcare and CardioWise have announced a commercialization partnership.

In its first full year of operations, **Cellia Science** made excellent progress in the development of its point-of-care hematology analyzer based on label-free, deep-UV imaging technology. The company added Dr. Wilbur Lam from Emory University as Chief Medical Officer, who will provide significant expertise developing and applying novel technologies using micro/nanotechnology, microfluidics, and cell mechanics to research, diagnose, and treat hematologic and oncologic processes. Product requirements were refined through interviews with numerous stakeholders, including oncologists, pathologists, nurses, and clinical administrators from a wide range of practice settings. The excitement amongst practitioners for a Clinical Laboratory Improvements Amendments (CLIA)-waived device that could provide rapid blood cell counts was notable. A blood cell analyzer that can be used in any care setting would enable rapid CBC results regardless of location—whether it be an infusion clinic, hospital, or even the patient's home—speeding treatment decisions and reducing delays to critical therapies. Cellia partnered with a design and manufacturing firm to optimize the consumable cartridge. Use of this cartridge will be straightforward without significant training, similar to testing glucose with fingerstick capillary blood samples. The new design also leverages proprietary novel technology that will reduce the turn-around time of the test.

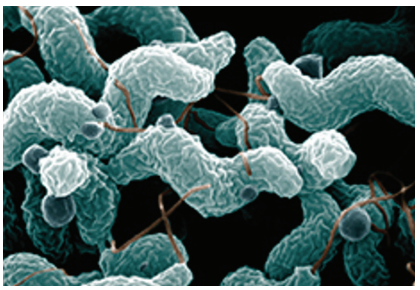


Readmissions or premature discharge of heart failure patients could be reduced by improving the ability to detect subclinical fluid congestion which is due to elevated cardiac filling pressure. Unfortunately, the clinical tools available today for identifying elevated filling pressure either lack sensitivity or specificity, and/or are expensive and invasive, thus limiting their use both inside and outside of the hospital. **Vixiar Medical**'s non-invasive Indicor™ addresses this significant unmet medical need. Presently, a clinical trial is being run at Johns Hopkins University in support of an FDA submission planned in 2023.



Materials, Food Safety, and Analytical Instrumentation Portfolio

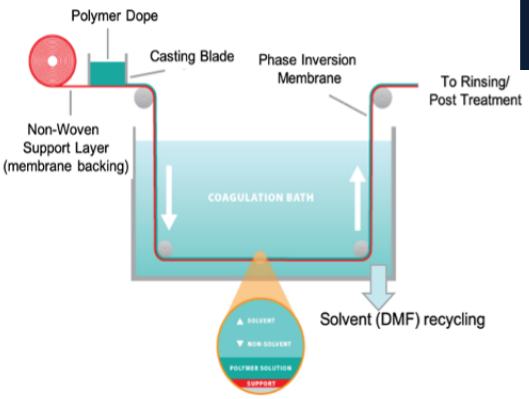
Akeso Biomedical faced two significant challenges at the beginning of 2022 for its CI-FER™ animal feed additive product. The first was related to the collapse of the supply chain, and a considerable spike in contract manufacturing, raw material, energy and shipping costs. The second challenge was to better understand how to use the CI-FER product to improve performance. Vast progress was made on both fronts. Akeso identified a new manufacturer for CI-FER. Akeso now has a clear understanding of dosing requirements for the CI-FER product. A new trial was run at Southern Poultry in Georgia and the data clearly shows how the product should be administered, and the optimum dose. The new trial also demonstrated that Akeso's CI-FER can provide as good of results in knocking down pathogens as antibiotics: this is a major achievement. Importantly, CI-FER is not an antibiotic but helps prevent infections from becoming established while avoiding the emergence of resistance in both livestock and humans.



Scanning electron microscope image of Campylobacter jejuni bacteria. Akeso is developing feed additives to prevent bacterial infection of poultry and swine without the use of antibiotics.

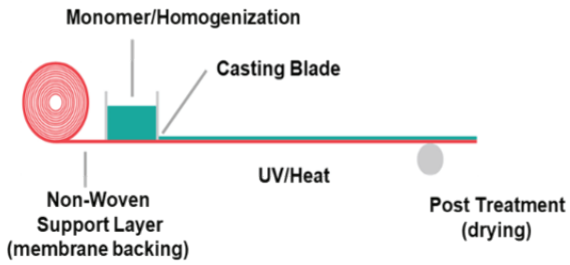
Filtravate has developed three formulations of its ultrafiltration membrane for protein purification, viral filtration, and continuous bioprocessing. Specifically, membrane pore sizes of 2 nm, 20 nm and 35 nm have been demonstrated, each with unique and needed market applications. A pilot-scale production facility has been established at New Mexico State University focusing on membrane reproducibility and commercial scalability. We have chosen monoclonal antibody (mAb) bioprocessing application as our lead product due to the rapidly increasing market opportunity and unmet need. Lead product formulation has been repeated at two additional labs. Ongoing formulation optimization, and technical collaboration efforts have been established with two leading research and development organizations. Filtravate acquired $650K non-dilutive funding from NSF and DOE to develop new product formulations and produce first commercial prototype product.

Conventional Membrane Fabrication Process:



Filtravate Membrane Fabrication Process:
Compatible with the current manufacturing equipment

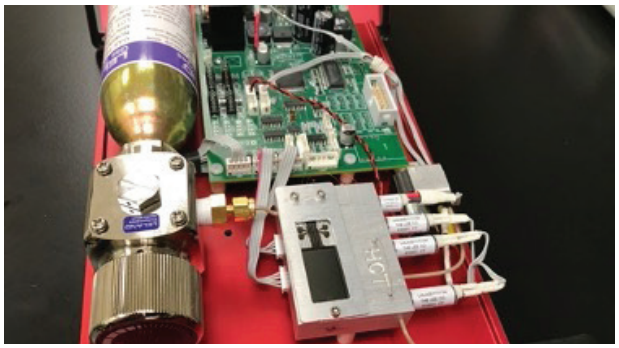
- Simpler process, fewer steps
- No solvent nor solvent recycling



Tesseract Structural Innovations continues to make strong commercialization headway on its patented Uniform Deceleration Unit™ technology for auto crash energy absorbance. 2022 was noteworthy for the initiation of three joint development projects with a major U.S. OEM. The company's efforts have largely continued to focus on work on electric vehicles (EVs) mostly in protecting batteries and the light-weighting of components for EVs. One collaboration, with our partner Cymat, was as part of the Canadian Automotive Parts Manufacturers' Association concept vehicle Project Arrow. The Project Arrow concept vehicle was partially unveiled in Windsor, Ontario in mid-October. A full unveiling will be at the Consumer Electronics Show in Las Vegas in January before showing at more than 20 auto show events across North America in 2023.

Project Arrow demonstration vehicle featuring Tesseract UDU crash protection technology.

Zebra Analytix is developing Microelectromechanical systems (MEMS)-based miniaturized gas chromatography systems and other portable, cost-effective analytical instruments. The company's microfabricated chips—capable of multi-channel separations in a single package—offer numerous advantages, including vastly decreased instrument size, lower cost, versatility, improved sensitivity, portability, ease of operation, and speed to results. A strategic partnering agreement was formed to bring to market breath analyzer systems for health diagnostics using Zebra's patented technology.



Zebra's microGC system with company's MEMS "cluster" columns (open box view).

The VIC Innovation Ecosystem

VIC Tech

Mother company of the ecosystem; provides highly experienced team, proven process, and important relationships in a scalable, decentralized branch office structure

VIC Foundry

Develops a pipeline of new technologies as IP foundations for the future VIC portfolio companies

VIC Fellows

A talent pipeline for new companies and the Opportunity Assessment Team

VIC Investor Network

Founding and early stage capital into every VIC portfolio company from nationally comprised angel investor network

Strategic Investor Relationships

Follow-on capital rounds

VIC Tech (victech.com)

In VIC Tech, the mother company of the VIC innovation ecosystem, we continue to expand our team with world class life science executive, strategic, clinical, and investor experience.

2022 VIC Team Expansion

New Member - Board of Directors

Chantell Preston, Houston

- 20+ years experience in healthcare operations and in the healthcare innovation ecosystem as an investor, advisor, and strategist
- CEO of Facilities Management Group (FMG)
- Has built and successfully exited several companies including Mentis Neuro Health where she was co-founder and Chief Development Officer

New Member - Strategic Advisory Board

Natalie Gassman, PhD, Birmingham

- Associate Professor of Pharmacology and Toxicology at University of Alabama at Birmingham
- Post-doctorates at the National Institute of Environmental Health Sciences and the Wake Forest University School of Medicine
- Former Senior VIC Fellow

New Members - Medical Advisory Board

Steve Dorman

Michael Gaspar

Jeffrey Haithcock

Natalia Jaimes

Forrest Moore

Amanda Pientka

Rajiv Sharma

Kate Tindall

VIC Fellows

Several of our 2021 VIC Fellows moved on to new roles in the VIC ecosystem. Kelly Mabry assumed the CEO position in Cellia Science as well as becoming the first addition to the recently created Executive in Residence program at VIC. Cristhiaan Ochoa and Evan Goldberg have been promoted from Fellows to Senior Fellow roles with Cristhiaan also assuming the chair position of our Medical Advisory Board. Natalie Gassman moved from her Senior Fellow role to a position on VIC's Strategic Advisory Board. The Fellows program is a valuable talent pipeline for VIC and, based on interviews after completion of the program, has been extremely successful and valuable in delivering new skills and experience to our Fellows for the commercialization of life science technologies. Our third class of VIC Fellows came on board in June of this past year.

Alexandra Antonioli, MD, PhD

- A PGY4 resident and member of the Psychiatry Research Track at the UT Southwestern Medical Center
- MD and PhD from University of Colorado
- Completed a medical journalism elective at ABC News in New York

Danielle France, PhD

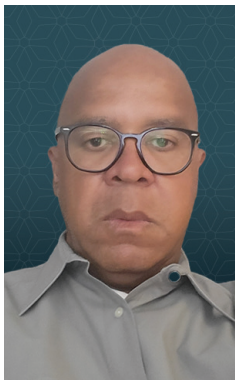
- Co-founder & CEO Microbial Pulse Diagnostics LLC
- PhD in biological engineering from MIT
- 15 years in experience in biophysics and microbiology research

Mark Jarboe, MBA

- COO Health Connect South
- MBA with an emphasis on international business from Georgia State University.
- Serves on several advisory boards and consults with early-stage companies

Matthew Leming, PhD

- Executive VP, Head of Product Development, US at TestCard.com
- PhD from University of Notre Dame and postdoctoral training at University of Pittsburgh Medical Center
- Worked at Texas Medical Center Accelerator



Ronald Walls, MD, MBA

- Principal Consultant & Founder of Pentacle Strategic Healthcare
- MD from Drexel University School of Medicine and MBA from Lake Forest Graduate School of Management

VIC Foundry (vicfoundry.com)

VIC Foundry is important to VIC as a pipeline of new life science technologies that have the potential to become the basis for future VIC portfolio companies. There were several new initiatives within VIC Foundry in 2022 including establishing a wish list of solutions to medical needs and searching for candidate technologies in these need areas from our broad network of research institution relationships around the world. Current VIC Foundry projects include an analytical instrument which represents a powerful and practical tool for rapid and specific detection of proteins. Additionally, there is a sample preparation technology for diagnostics applications, and two biopharma projects at various stages of progress.

VIC Investor Network

Founders Group Member

- Invests into every new VIC portfolio company at founding
- Lowest valuation, highest upside, longer time for first return
- Diversification by number of companies and industry sector
- Limited to 50 membership slots

Standard Group Member

- Able to invest in any investment round after the founding round
- Good valuations, high upside, opportunity for fast return
- Diversification by number of companies, industry sector and stage of development
- Unlimited number of membership slot

The VIC Investor Network (VIN) made six investments into the VIC portfolio in 2022, bringing the total number of investments by VIN to thirty-six since inception of the network in 2013. VIN had a significant exit event in 2022: An optional share buyout at a 5.6x multiplier. Some members took the buyout while others stayed in for further value growth. The weighted average IRR across all investments made through the VIC Investor Network to date has increased from 37.0% last year to 43.6% this year based on most recent or current investment round share prices. We anticipate this outstanding IRR to maintain in a similar range going forward.

Concluding Remarks

Medical innovation is experiencing unprecedented growth due to major advances in enabling technologies. These advances will quite clearly lead to significant improvements in both lifespan and healthspan (the part of a person's life during which they are generally in good health). They are also crucial to addressing issues such as an aging population with chronic diseases and the threat of infectious diseases like COVID-19. The increasing use of telemedicine and the shift towards prevention and personalized treatment options are also areas of rapid advancement.

The accelerating pace of innovation provides VIC (and other investors) the opportunity for high-impact, high-return investments in the life science space. Among all venture capital sectors, I believe that life science investment is the most promising due to its potential for transformation. Other sectors, such as machine learning and artificial intelligence, are undergoing rapid improvement, but artificial intelligence is itself one of the underlying technologies accelerating life science innovation.

For example, over the next 20 years, continued progress of cell and gene therapies will offer a complete cure for a wide array of diseases. There are now already over a thousand life science companies developing new candidates in this segment. Major shifts in how disease and injury are diagnosed and treated will upend current business models in biopharma and medtech. There will be more emphasis on prevention and more personalized treatment options. Personalized treatment will simultaneously be more effective and have fewer unwanted side effects. Treatment and diagnostic options will move from the clinic to the home. Much of the innovation is being done by young, nimble companies challenging conventional wisdom. Companies focused on these growth areas have a unique opportunity to deliver substantial value to investors and, ultimately, to society.

At VIC Tech, our portfolio companies are working tirelessly toward several of these paradigm changes. For example, as described earlier, CardioWise uses machine learning based analysis of cardiac CT imaging to provide unprecedented insights and quantitative tracking of heart health. Vixiar Medical, Cellia Science, and Zebra Analytix are moving diagnostic tracking out of the clinics and hospitals to the home for heart health, blood analysis, and biomarker breath analysis, respectively. Solenic Medical's novel non-invasive technology can prevent implant infections before they occur, as well as treat infections that have already happened. SFC Fluidics provides wearable drug delivery and monitoring technology. Solaris Vaccines can respond to emergent infectious disease threats at record speed. These are just a few examples from VIC's portfolio.

Looking ahead to 2023, we anticipate forming three to four new high-impact, high-return opportunity companies. We also will continue to work to expand the VIC Investor Network and drive strong returns for both VIC and our co-investors. We are excited by the strategic partner engagement, including capital investments, into our portfolio companies in 2022 and look to continue that progress in 2023. These efforts should lead to commercialization milestones that trigger acquisitions, for which the returns to VIC and VIC Investor Network members over the next 1-3 years are expected to be substantial.

R. Calvin Goforth
Chief Executive Officer