



INVEST IN 20/20 GENESYSTEMS, INC.

Pioneering the Multi-Cancer Early Detection (MCED) blood testing market

2020gene.com

Gaithersburg, MD



Healthcare

Biotech

Health & Fitness

Science & R&D

Repeat Founder

Highlights

Repeat Founder

Founder has started a previous company funded with \$2M+

- 1 Among the most affordable, accessible, and accurate multi cancer blood tests on the U.S. market
- 2 Secured over \$12 million in crowdfunding investments to date
- 3 Ranked #134 on the 2023 Inc. 5000 list of the “Fastest Growing Companies in America” (#1 in MD)
- 4 Partnering with major supermarket chain for in-pharmacy testing beginning in 1H 2024
- 5 Early entrant into what is predicted to be a \$50B market for multi-cancer early detection testing
- 6 Multiple issued or allowed patents in the U.S. and East Asia (available in Downloads section)
- 7 Groundbreaking partnership with a leading cancer center + big Asian funding in 1H 2024
- 8 Sales volume from our cancer testing more than doubled between 2022 and 2023

Featured Investor



John G. Compton

Invested \$67,500 ⓘ

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“Early investment in 20/20 GeneSystems represents my expectation to benefit from 20/20’s offering and focus on the newest paradigm in cancer detection. For most cancers, the paradigm for effective long-term treatment and disease remission relies heavily on early detection. Multiple cancer early detection testing (MCED) will become standard of care for cancer detection if the test detects a broad range of cancer types, if the predictive power of the test is sufficiently high (the likelihood that cancer is present), and if the test cost is sufficiently low (to justify routine testing). 20/20 GeneSystems markets an MCED test that meets these criteria and represents an early

entry into the huge cancer diagnostics market. The new partnerships with the MD Anderson Cancer Center and other research centers promise to significantly improve the predictive power of 20/20's MCED test across a range of cancers, jumpstart acceptance and adoption of MCED testing, and solidify a competitive advantage for the Company."

Our Team



Jonathan Cohen CEO

Johns Hopkins MS in Biotech + 25 yrs leading medical diagnostics: partnerships, marketing, IP, & finance. Secured \$25M+ in funding & championed pro-biotech legislation. Early pioneer & inventor in multi-cancer early detection blood testing.



Michael Lebowitz Ph.D., Chief Scientific Officer

Johns Hopkins Ph.D. (Biochem, Cell & Mol Bio) with 30+ yrs life sciences R&D in cancer Dx & Tx. Adjunct Prof. (Biotech) at Johns Hopkins & U. of MD Baltimore County.



Jiming Zhou Ph.D., Chief Operation Officer

20+ yrs academia & industry. Led \$330M pharma project. Managed Covid testing for 20/20: 400,000+ tests, peak 3,000+ tests/day.



John Compton Ph.D., Board Chair

20/20 Chair & BioDx co-founder (sold to Opko). Led BioReference as VP (2007-2013). MIT BS (Bio/Physics), UC Berkeley Ph.D. (Biophysics).



Michael A. Ross M.D., Board Member

20/20 Director (2016-present). Grew Euclid Systems revenue 5x in 5 years (CEO 2015-2020). GWU Ob-Gyn clinical professor (since 1979). Boards experience in biotech & medical devices. BS (Chem/Bio) & MD.



Anne Shiflett Acting CFO



30+ yrs mgmt, finance & accounting (19 yrs life sciences). Secured \$200M+ funding (strategic, PE, VC, etc.). Led company from turnaround to \$1.2B sale.



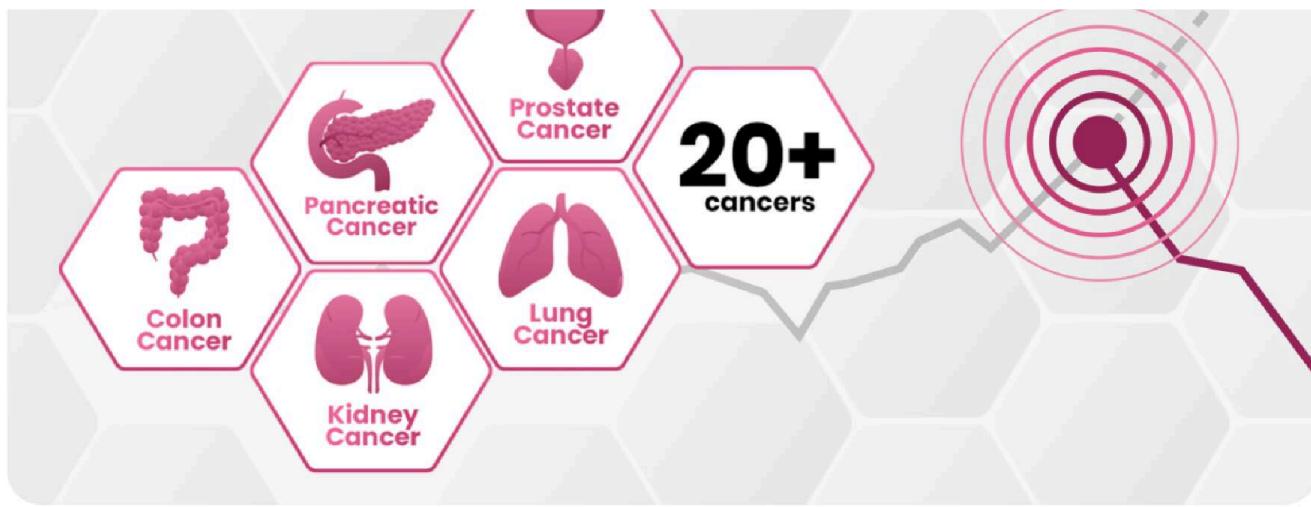
Marc Gordon

One of the first clinical labs to enter the fast-growing Multi-Cancer Early Detection (MCED) market, we feature a high quality, affordable blood test that outperforms other competitive technologies.

Our Story

The survival rate for many types of cancer significantly improves when treatment is started early, following detection at early stages before the cancer has spread to distant organs. Unfortunately, screening is common for only a small number of tumor types (breast, colon, prostate, cervix) but not for many deadly cancers such as those of the lung, liver, pancreas, and ovaries.

Our mission is to help "**bend the curve**" of cancer mortality in the U.S. and around the world through early detection.



Since cancer does not discriminate by income or region, we believe that making tests affordable and accessible is as important as making them accurate. Simply put, new and innovative cancer tests should be made affordable and available to everyone who is at risk for developing this dreaded disease.

The Market

In June 2021, the company Grail launched their *Galleri* test, a multi-cancer early detection (MCED) blood test based on circulating tumor DNA (ctDNA). Three months later, Grail was acquired by Illumina for over \$7 billion in cash and stock. Another company, Thrive, was acquired by Exact Sciences in 2020 for \$2.15B. Since then, leading medical authorities, such as *New York Times* bestselling author of *Outlive*, Peter Attia, MD have embraced and encouraged this new screening paradigm. Almost \$100 million in *Galleri* tests were sold in 2023. Securities analyst Puneet Souda estimates the MCED market will eventually generate \$50 billion in annual sales.



A bi-partisan bill was introduced in Congress in 2023, with over 200 co-sponsors that would



200 co-sponsors, that would help expedite Medicare reimbursement for MCEDs.

Passage of this bill is a top 2024 priority for the American Cancer Society and many other disease advocacy organizations. The National Institutes of Health, with support from the White House Cancer Moonshot, is investing more than \$100 million to support multi-year clinical trials of MCEDs.

Significant momentum has been building for MCEDs since 2021, but there are several key problems with competing tests, nearly all of which rely on ctDNA.

The Problem with Competing MCED Tests



Many earlier stage cancers can be missed.



The cost is nearly \$1,000.



Large volumes of blood are required, which cannot easily be collected at home or retail locations.

Our Solution & Competitive Advantages

OneTest for Cancer is an MCED centered on measurements of the levels

of antigens that tend to rise early in tumor development. It is based on a testing approach that is near-universal throughout East Asia. Each year, many adults in Japan, Korea, and China visit “Health Check-up” Centers where their nearly four-hour physical exam almost always includes an assessment of circulating tumor antigens. 20/20 has developed and validated AI powered algorithms utilizing real-world outcome data from tens of thousands of previously tested individuals.

Using robotic analyzers with biomarker detection kits that are mass produced to meet demand in East Asia permits us to offer our tests at a fraction of the costs of ctDNA. Furthermore, our test sensitivity for many earlier stage cancers is superior to that reported by our leading competitors. Additionally, proteins and other biomarkers in OneTest can be detected in fingerstick quantities of capillary blood permitting these tests to be accessed without the need for phlebotomists.

Competitive Advantages

OneTest™



Competitors



✓ Requires a small amount of blood

✓ Better sensitivity for early stage cancer

✓ Under \$300 per test

✗ Requires a large quantity of blood drawn

✗ Less sensitive detecting early stage cancer

✗ Over \$1000 per test

Traction from Historic Covid-19 Testing (2020-2022)

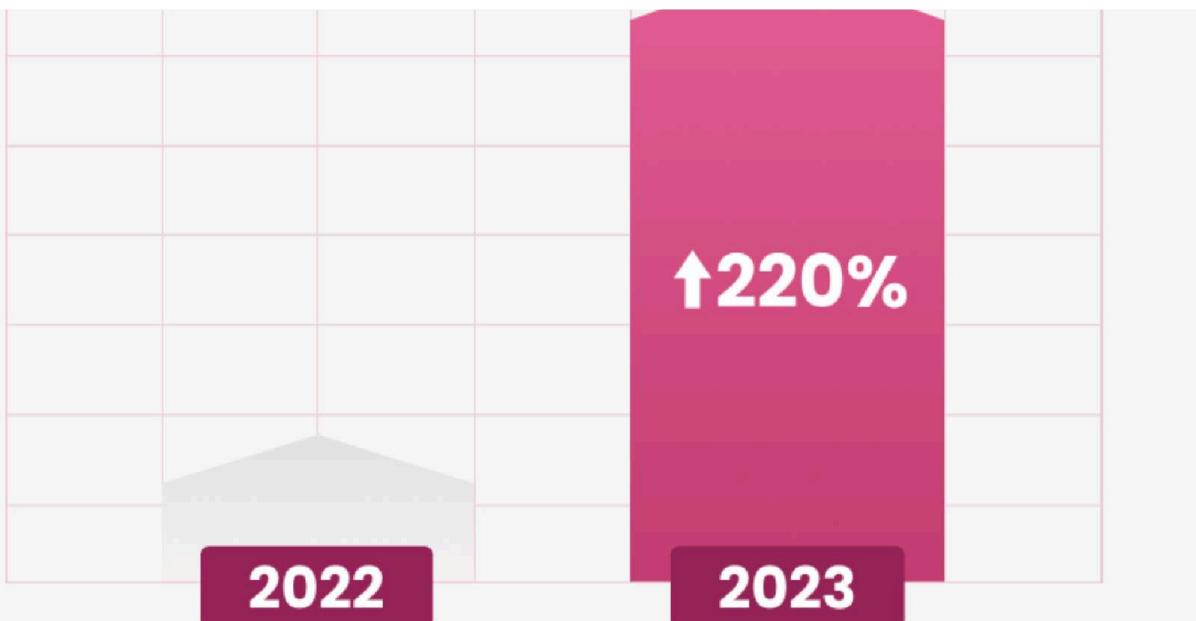


\$24.5M
in revenues

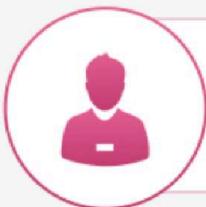
\$15M
in profits

Using these proceeds to focus on our sales and marketing efforts of OneTest in 2023.

Last Year Cancer Test Sales Increase



These Customers Include:



>50
New Employers



>14
New Healthcare and
Wellness Organizations



>1600
Retail Customers

How Does OneTest™ Work?

OneTest is a patented multi-cancer early detection (MCED) blood test that integrates well-established biomarkers with cutting edge AI technology. It is recommended for healthy, middle-aged adults who seek to lower their risks of facing late-stage, deadly cancers. It is paid for by employers or the individuals who order the test, the same payment model common throughout East Asia and with our competitors in the

U.S. Earlier detection of cancers of the lung, pancreas, liver, and ovaries are among those that the test may be particularly useful, as these cancers are not commonly screened for in the U.S.

The test can work with even a small quantity of blood using capillary collection techniques and is sent to our CLIA certified, CAP Accredited lab where it is run using sophisticated FDA approved automated analyzers from companies like Roche and Abbott Diagnostics, the same robotic instruments used in major hospital systems. Within about 3 business days, we issue a comprehensive lab report that includes biomarker values and their associated expected ranges provided by the manufacturer for each marker. These values are then plugged into our proprietary machine learning algorithms along with clinical factors such as age and gender to produce our innovative OneTest risk scores. Our algorithms improve the accuracy of these tests compared to the biomarker values alone.

Once the blood is tested and the OneTest risk scores are generated, a detailed report is uploaded onto our HIPAA compliant patient portal where consumers are able to review results. Importantly, the portal enables the consumer to see graphics showing the changes in their marker values over time as they get tested over the years. These trends are very valuable clinically and an increase in marker values over time can be a sign of malignancy.



Medical Professional Authorization

Every test is approved and ordered by a medical professional



Blood Collection

A small quantity of blood is collected



Lab Testing

The blood sample is sent to a CLIA certified CAP Accredited lab.



Analyzing Process

The sample is run using FDA approved reagents and automated analyzers from companies like Roche and Abbott Diagnostics.



Risk Score Calculation

The biomarker values are plugged into proprietary machine learning algorithms, along with clinical factors such as age and gender, to produce the OneTest risk scores.



Lab Report Generation

A detailed report is uploaded onto a HIPAA compliant patient portal.



Review Results

The user is able to review results, including graphics showing changes in marker values over time.



Clinical Significance

Biomarker trends, risk scores, and medical professional consultation leads to more informed health decisions.

Our Mission

Our mission is to make blood tests that aid in the early detection of cancer available to every adult through offering tests that are better, more affordable, and easier to access than anything else on the market.

more accurate, and easier to access than anything else on the market.

We make these tests available to everyone so we can help people detect and treat cancers early, ultimately leading to better cancer outcomes and saving lives.

We accomplish this mission by using AI and real-world data to improve upon well established and widely used biomarkers like CEA, AFP, and PSA. This allows us to keep the costs of running our tests low because our reagents are readily available and commonly used around the world. The data from these tests can then easily be plugged into our state-of-the-art algorithms to improve their accuracy and provide personalized cancer risk assessments.

All testing is performed in a tightly regulated CLIA licensed, CAP accredited, high complexity laboratory with an exemplary record of compliance. Our lab personnel are very experienced running tests in a high throughput environment, and our state of the art laboratory testing instruments enable us to turn results around rapidly.

We are committed to further research not only to improve our currently available cancer tests but to add new and innovative tests to our menu in the future. We will use the same spirit of innovation that drove us in the journey to OneTest Premium in order to continue to enhance our cancer offerings and soon launch new cutting edge tests including capillary blood collection techniques and tests that aid in healthy aging and longevity.

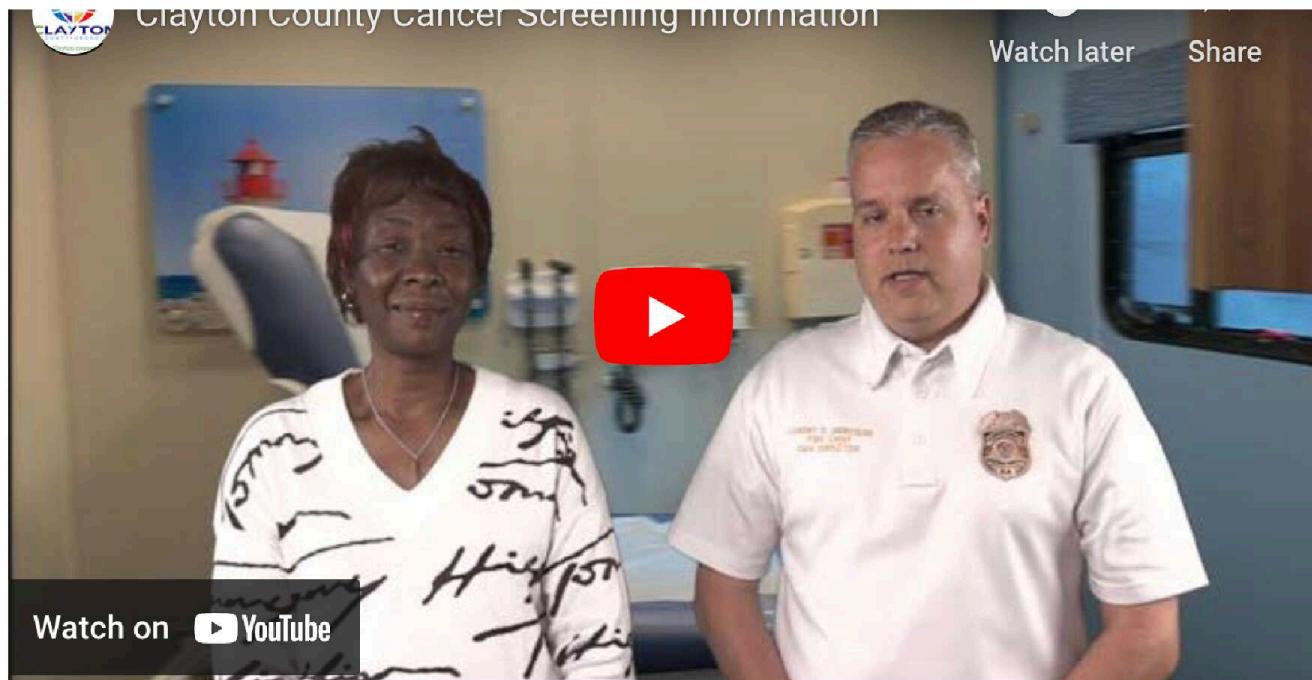


Proprietary Tech

20/20 has 4 U.S. patents covering AI powered cancer blood tests with new patents soon to issue in Asia. Furthermore, during the first half of 2024, we expect to close a major exclusive patent license and sponsored research agreement with one of the world's largest cancer centers. This will substantially expand our patent estate and give us access to unique and proprietary know-how, algorithms, archived blood specimen banks, and trade secrets. Of note, the company founder and CEO, Jonathan Cohen, is a seasoned patent attorney very experienced in building and leveraging intellectual property in the diagnostics industry. Unlike most other available MCEDs, OneTest™ was developed from an entirely asymptomatic, real-world cohort of individuals, meaning that at the time of testing, patients were not known to have cancer and all identified cancers were detected in the post-test period. Most developers use known cases of disease for test development which allows them to use smaller study cohorts. This latter approach may result in biomarker signatures that have greater ability to differentiate between cancer and non-cancer (greater sensitivity and specificity), but less overall utility, as they do not detect cancer as early.

Our proprietary algorithms developed from our distinctive data sets are what make our tests truly unique.

OneTest™ Use Cases



**Clayton County has used
OneTest to screen their fire
department since 2019.**

In total, we have helped them to screen over
900 firefighters and over 1,300 total tests.

Clayton County is a customer that returns to us year after year testing approximately 300 firefighters on average because they recognize the value of OneTest not just for the health of their firefighters but for the

cost benefits of our affordable tests and knowing that catching a cancer early can save a substantial amount of money in the long run.

“Dr. Loewenstein **chooses to use OneTest** at her occupational health practice

It's easy to use, provides well-written reports, has a fast turnaround time, requires no prep, and the results are self-explanatory and useful.”



Dr. Loewenstein

Our Competing Space

Our primary competition in the MCED arena is Grail and other companies seeking to deploy tests based on sequencing of circulating tumor DNA (ctDNA). There are three key disadvantages of ctDNA testing that our proteomic based (measurement of tumor antigens) approach overcomes:

OneTest™
Competitive Advantage



Detection of Earlier Stage Cancers

Based on available evidence from our company, its collaborators, and the scientific literature, tumor antigens and markers of inflammation tend to be more detectable in earlier stage cancers than ctDNA.



Cost

Since the biomarkers in OneTest are used to screen tens of millions of individuals throughout East Asia, our costs to run them are lowered due to automation and economies of scale.



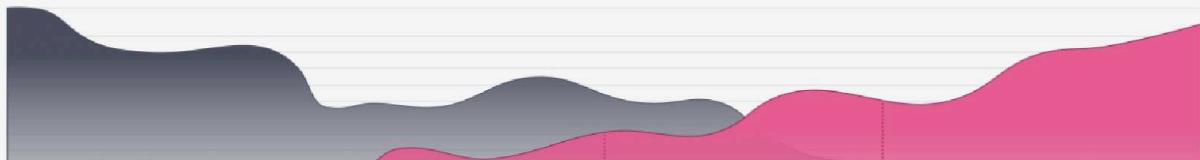
Ease of Access

We require much less blood than competing ctDNA based tests permitting us to use various pain-free fingerstick-like devices that can collect blood at retail locations or at-home without the need for a professional phlebotomist.

How We Make Money?

2023 and early 2024 shows significant Cancer Testing revenue growth while our costs of customer acquisition are dropping.

● Revenue Growth ● Customer Acquisition Cost

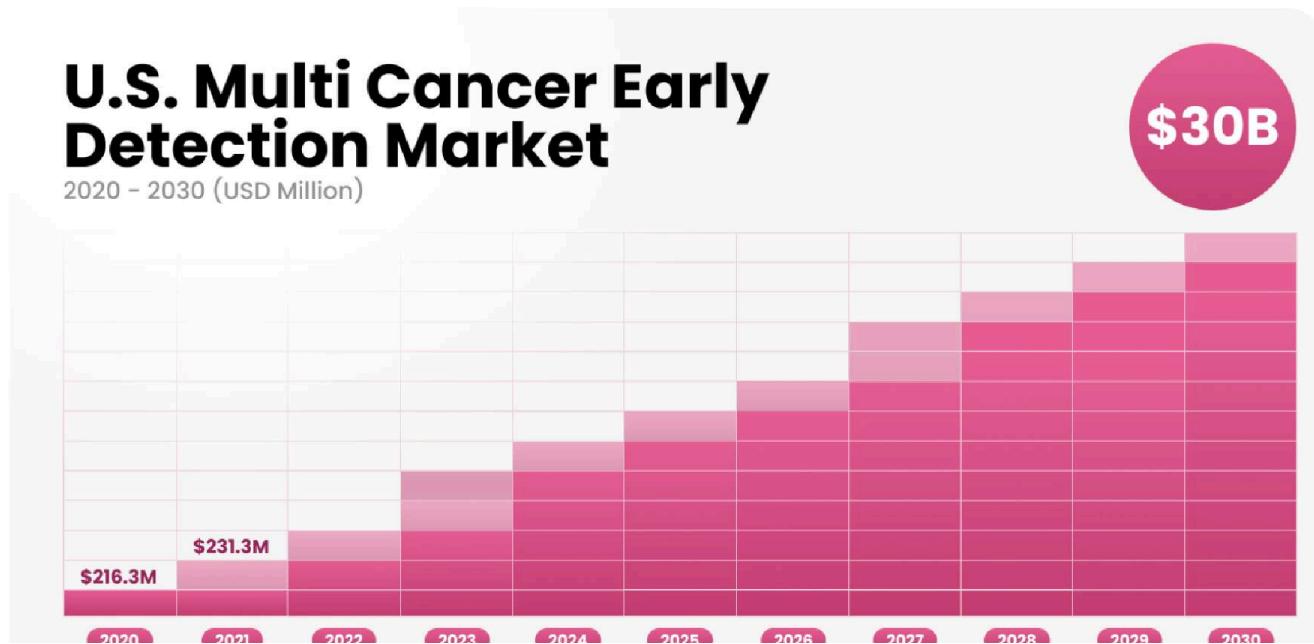




We have a line of sight to profitability, but our priority for 2024-26 is growth. Our major markets are employers and consumer initiated tests (CIT) although a growing number of physician groups are embracing our product, especially those focusing on preventative and lifestyle medicine.

Huge, Exponential Market

The MCED market, of which 20/20 is among the early entrants in the U.S., is huge and growing exponentially. While not guaranteed, we estimate that these tests will yield nearly \$30 billion in annual revenue worldwide by 2030. (Other analysts project a market as large as \$50 billion)



A bill in Congress, endorsed by the American Cancer Society, and with more than half of all members as co-sponsors would accelerate Medicare coverages of MCEDs. 20/20 has engaged with the lead sponsor of that bill, as well as the Congressional Budget office, and believes that due to our price point, we may be positioned to be among the first to obtain national coverage.

President Biden's "Cancer Moonshot" is prioritizing MCEDs and funding clinical trials at the National Cancer Institute (NCI). The NCI states that "The Cancer Moonshot is marshaling resources across the federal government to speed progress in cancer research and lead to improved cancer prevention." The aspect of the Cancer Moonshot program that is specifically focused on MCEDs is the NCI Vanguard Study on Multi-Cancer Detection. This shows a commitment from the government to increase funding and effort into the cancer space and recognizes MCEDs as a crucial part in the fight against cancer going forward. This trend of federal funding is trickling down into the states as well, as bills to provide firefighters funding for cancer screening are popping up across the country. Maryland has already kicked off a multi-cancer screening grant program for firefighters and New Hampshire and Oklahoma are following suit.

20/20 has mainly focused our sales and marketing efforts in two major areas, employers and consumer initiated tests (CIT). Additionally, medical practices with a specialty in lifestyle and prevention are also becoming early adopters. We have just scratched the surface in both of these targets and their market size is continuing to grow.

Until now, fire departments have been our main focus on the employer side due to their increased cancer risk and our drive to serve the first responder community. However, we will begin to focus on employers in different sectors this year. Employee wellness is a growing aspect of companies, and we will tap into that market by becoming involved in large company HR / health and wellness plans.

Our CIT market is another very exciting aspect of our business. We have shown rapid CIT growth year over year, and we expect that trend to continue. As more people learn about MCEDs through the buzz being created by the government to focus on them, people getting these tests and spreading the word, and our marketing efforts, we expect the market to continue to grow. We anticipate our new capillary collected blood tests to grow out the D2C market even further. This will give people access to testing at the pharmacy counter and expand the availability of our test nationwide through adding more testing locations, thus adding to the convenience of the sample collection aspect of this test.

To review, the demand for MCEDs is increasing as this type of testing becomes more accepted as a routine part of an annual physical. The federal government is paving the way by pouring money into dedicated MCED research, and this is warming up both the employer and consumer initiated markets. Every adult middle aged and above would likely benefit from using MCEDs like OneTest, and that opens the door for a very large segment of the population to order our tests.

The Right Investment at the Right Time

In 2024, there is intense interest in MCEDs with a bill in Congress to provide Medicare coverage for these tests having an unprecedented +300 co-sponsors (Republican and Democrat). Passage of this bill is a top priority of the American Cancer Society and is being championed on the editorial pages of The Wall Street Journal. 20/20 is uniquely positioned to benefit from this momentum with the only test priced low enough to be available to tens of millions of beneficiaries of Medicare and private insurance.

Our Roadmap

2024 is expected to be a pivotal year for our company with a significant increase in sales, a large strategic financing investment, and a technology license and sponsored research agreement with one of the world's largest cancer centers. We also expect to be the first and only provider of a multi-cancer test at retail pharmacies. A new longevity test is also planned for the second half of this year that will incorporate various biomarkers along with dietary and lifestyle recommendations based on peer reviewed scientific papers.

Use of Your Investment

This equity crowdfunding round, our fourth in as many years, is mainly a bridge to a much larger strategic investment we expect to close before the end of the first half of this year. Proceeds from this round will mainly be used to advance sales and marketing with about 20% being used for research and development. Current R&D involves AI algorithm improvements and validation of finger and upper arm capillary collection so that consumers can easily access our tests at their local pharmacy (and eventually at home).

OneTest™ Is a Rare Opportunity

20/20 was one of the first life sciences companies to succeed at equity crowdfunding. Today, life sciences and biotech companies are now

among the most successful at this type of financing. But most of these companies—especially those involved in drug development—are many years from getting a product to market. 20/20 is unique in that it combines the huge upside potential of biotech from a company already at a nearly \$2 million revenue run rate with substantial growth expected by the end of 2024. Lawmakers at the federal and state levels are, on the one hand, demanding lower costs for prescription drugs while advancing legislation to expedite coverage for multi-cancer tests. Simply put, we offer a relatively lower risk but still very high return opportunity compared to our peers in the life sciences. 20/20 is also an opportunity to “do well while doing good” by generating future financial returns while potentially saving many lives along the way. The fact that over 8,500 American firefighters are trusting their health to OneTest exemplifies our commitment to serving those who serve us all.

Downloads

<https://jamanetwork.com/journals>

Downloads



[Patent US20230393150A1](#)



[Patent US20230223145A1](#)



[1st Issued OneTest Patent US011621080B2](#)



[Cancers Article](#)



[Cancers Review](#)



[Computers in Biology and Medicine Publication](#)



[JAMA Article Questions Swirl Around Screening for Multiple Cancers With a Single Blood Test](#)



[Shore Lebowitz Patent US009753043B2](#)



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