

Heart Test Laboratories, Inc.

Initiating Coverage with BUY and \$3.30 Price Target

Heart Test addresses the enormous market for early detection of heart disease with an innovative, non-invasive ECG solution. FDA De Novo resubmission should provide a stock catalyst.

Initiating with BUY: We are initiating coverage of Heart Test Laboratories, Inc. with a BUY rating. Heart Test is a development phase creator of ECG hardware and associated algorithms for the early detection of heart disease.

Heart Test has created a new way to provide early diagnosis of heart disease, before it gets to the acute phase: In addition to developing a proprietary ECG device, the MyoVista, Heart Test has created proprietary ML algorithms which are able to interpret the data captured by the MyoVista to detect potential diastolic dysfunction (abnormalities in the relaxation phase of the heartbeat) which could indicate early signs of heart disease. This stands in contrast to common ECGs, which can measure heartbeat irregularities, but not diagnose heart disease.

Treatment of acute heart disease is the single largest burden on the US and global health care system: Not only is treatment of acute heart disease estimated to cost the US health care system over \$200 billion annually, the cost in dollars and lives could be greatly reduced through earlier detection of the disease. This is because preventative measures are much less costly and can prevent the disease from becoming acute.

Heart Test has a 'razor/razorblade' business model, with sales of testing supplies likely to exceed sales of the MyoVista device: In addition to selling its ECG device, Heart Test plans to market its proprietary electrodes. These are disposable items costing roughly \$10 per test. The company anticipates sales from these test supplies could greatly outstrip sales of the MyoVista testing machine, due to the large number of tests that could be performed annually.

Heart Test expects to resubmit its application for De Novo FDA clearance for the MyoVista by the end of FY2023 (Apr), providing a potential catalyst for the stock: In its Q2 FY2023 business update, Heart Test confirmed it is on track to resubmit its application for De Novo FDA clearance of its MyoVista device by April 2023. The company originally submitted a De Novo application in Dec 2019, but the FDA ultimately raised concerns that the 343-patient data set the company used was insufficient to establish the probable benefit of the algorithm without a new validation dataset. For its new submission, the company is close to completing enrollment for a new validation study and has enrolled additional enrichment study patients to provide extra data. The company already has a working version of the MyoVista and awaits FDA clearance to begin marketing its products.

More financing required: In its most recently reported quarter, Q2 FY2023 (Oct), Heart Test reported \$3.1 million in cash on the balance sheet, enough to last through the April quarter. We believe the company will need additional financing to continue operating through the expected approval of its De Novo resubmission and into the marketing phase of its product launch.

12-month price target of \$3.30 based on a NPV analysis: We calculate a 12-month price target for shares of HSCS of \$3.30. This is based on a NPV analysis, representing 280% upside from the current share price. We believe this valuation appropriately balances out the company's high risks with the company's high growth prospects and large upside opportunities.

Company Description

Based in Southlake, Texas, Heart Test Laboratories, Inc. is a medical devices maker focused on using ECGs to provide early detection of heart disease.

COVERAGE INITIATION

Rating: BUY

Ticker: HSCS

Price: \$0.87

Target: \$3.30

Stock Data

Exchange:	NasdaqCM
52-week Range:	\$0.71-6.00
Shares Outstanding (million):	8.2
Market cap (\$million):	\$6.8
EV (\$million):	\$4.8
Debt (\$million):	\$1.1
Cash (\$million):	\$3.1
Avg. Daily Trading Vol. (\$ 000s):	\$30.3
Float (million shares):	6.2
Short Interest (thousand shares):	24.4
Dividend, annual (yield):	NA

Revenues (US\$ million)

	<u>2023E</u>	<u>2024E</u>	<u>2025E</u>
	<u>(Cur.)</u>	<u>(Cur.)</u>	<u>(Cur.)</u>
Q1 Jul	0.0A	0.0E	0.6E
Q2 Oct	0.0A	0.0E	1.0E
Q3 Jan	0.0E	0.1E	1.6E
Q4 Apr	<u>0.0E</u>	<u>0.3E</u>	<u>2.2E</u>
Total	0.0E	0.4E	5.4E
EV/Revs	NM	12x	0.9x

Earnings per Share (pro forma)

	<u>2023E</u>	<u>2024E</u>	<u>2025E</u>
	<u>(Cur.)</u>	<u>(Cur.)</u>	<u>(Cur.)</u>
Q1 Jul	(0.28)A	(0.26)A	(0.29)E
Q2 Oct	(0.22)A	(0.27)A	(0.31)E
Q3 Jan	(0.22)E	(0.29)E	(0.28)E
Q4 Apr	<u>(0.22)E</u>	<u>(0.29)E</u>	<u>(0.29)E</u>
Total	(0.94)E	(1.10)E	(1.17)E
P/E	NA	NA	NA

Important Disclosures

Ascendant Capital Markets LLC seeks to do business with companies covered by its research team. Consequently, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making an investment decision.

For analyst certification and other important disclosures, refer to the Disclosure Section, located at the end of this report, beginning on page 30.

Exhibit 1: Heart Test Laboratories, Inc. Daily Stock Price Since IPO (June, 2022)



Source: <https://bigcharts.marketwatch.com/>

INVESTMENT THESIS

We are initiating coverage of Heart Test Laboratories, Inc. with a BUY rating and a 12-month price target of \$3.30.

HSCS is developing technology to make ECG tests early predictors of heart disease. Heart Test Laboratories, DBA HeartSciences, is an innovative medical device company whose mission is to transform the ECG test into an early predictor of heart disease. While the company is registered as Heart Test Laboratories, Inc., it uses the brand 'HeartSciences' for its products. We will be referring to the company as 'Heart Test' throughout this report. The company has created a compact proprietary device with 12 leads called the MyoVista which measures a patient's heart signals and provides a simple and intuitive readout indicating the risk of heart disease from Highly Negative to Highly Positive. In addition, the company has designed proprietary clamps and electrodes which are placed onto a patient's skin.

According to the USPSTF (United States Preventive Services Task Force), traditional ECGs have no more predictive ability for heart disease than assessing traditional risk factors, such as smoking, blood pressure and cholesterol levels. Heart Test's technology will change this via the use of proprietary algorithms which have the ability to detect diastolic dysfunction, i.e., irregularities in the relaxation phase of the heart's pumping. Diastolic dysfunction is one of the earliest indicators of heart disease, providing a window into potential issues far sooner than other indicators.

Exhibit 2: Heart Test Laboratories, Inc. Corporate Highlights

HeartSciences: An Innovation Leader in a New Era for ECG

- ✓ Designed to address the significant diagnostic gap in heart disease.
- ✓ New era for ECG - Disruptive technology with new AMA CPT codes.
- ✓ Millions of ECG's performed every week – Razor/ razorblade sales model.
- ✓ >\$60 million investment in the Company.
- ✓ Significant body of publications and clinical evidence.
- ✓ FDA De Novo resubmission expected current fiscal year.



Source: Company Reports

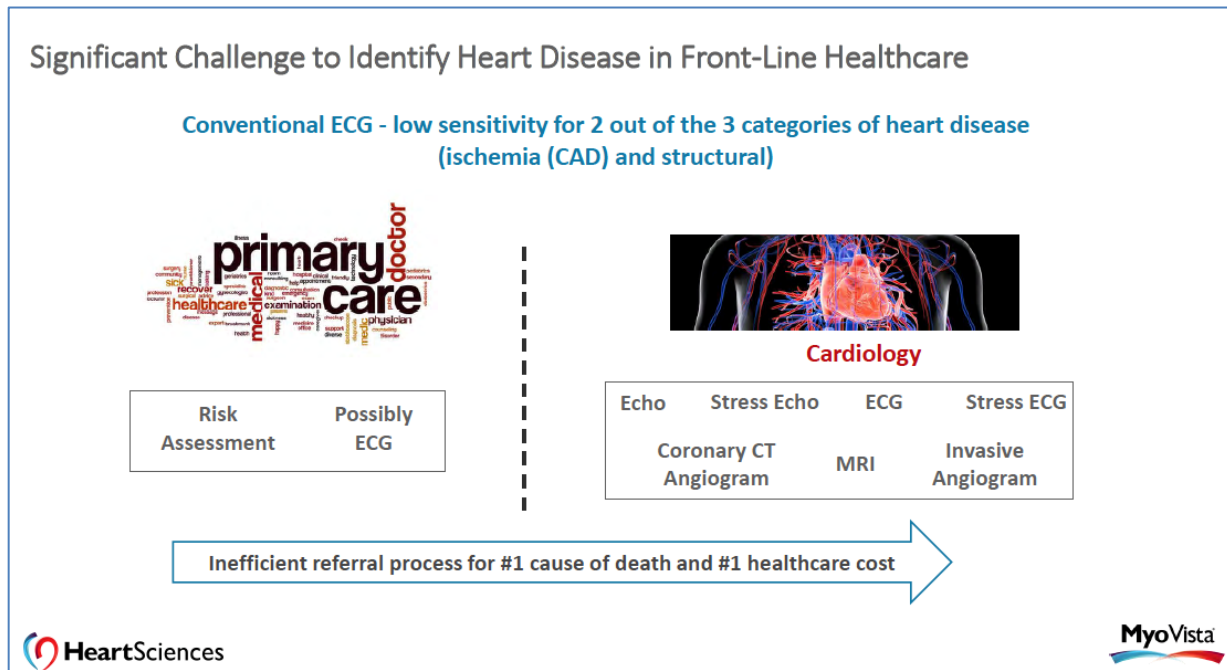
The data that the company has generated creates a huge barrier to entry. Heart Test's algorithms have been developed thanks to years of investment in clinical studies. The accumulation of this proprietary database constitutes the single biggest 'moat' for Heart Test. In total, Heart Test has invested \$60 million in its proprietary technology.

The absence of cost-effective front-line testing has resulted in the over-use of costly cardiology-based diagnostic tests. Heart Test believes that there is currently no low-cost, front-line medical device that is effective at screening for heart disease. Noninvasive cardiac tests are significant contributors to healthcare costs, accounting for greater than 40% of Medicare Part B spending on medical imaging, or over \$17 billion annually according to the US Centers for Medicare & Medicaid Services, or CMS. Diagnostic tests in current use for patients typically in a specialist cardiology or hospital setting include:

1. **Stress ECG testing.** A non-invasive diagnostic test with a cost of approximately \$200 with, according to the American College of Cardiology, a sensitivity of 68% in the detection of CAD (Coronary Artery Disease); typically performed in a cardiologist setting and requires the patient to run on a treadmill, which can be difficult for many patients.
2. **Echocardiograms.** A non-invasive diagnostic imaging test, similar to an ultrasound, that is effective in the detection of heart disease; however, the Medicare cost of an echo in a hospital is approximately \$600 and can be as much as \$2,000 if performed privately. The echocardiogram is frequently ordered by primary care physicians and is the most common cardiac imaging test upon referral. According to the 2018 National Ambulatory Medical Care Survey, office-based patient care physicians, excluding anesthesiologists and federal facilities such as VA clinics, ordered or provided 10 million echocardiograms. However, according to a December 2017 study in Clinical Cardiology that examined the appropriateness versus the value of echocardiograms ordered by primary care physicians, only 22% of patients had abnormalities and only 2.5% experienced a change in patient management that corresponded with the initial suspected diagnosis and echocardiographic findings.

3. **Cardiac imaging tests.** These include nuclear stress tests and coronary CT angiograms, and can be conducted noninvasively, but typically cost \$1,000 or more. There are more than 10 million cardiac imaging tests conducted in the United States each year. According to a study published by the AHA in September 2020 that reviewed previous CT test results of nearly 40,000 patients who underwent coronary CCTAs from January 2007 to December 2013, only 15.3% of patients had obstructive CAD. Despite the high negative outcome rates, costs and patient exposure to radiation, these tests remain commonplace.
4. **Coronary angiograms.** An invasive test in which dye that is visible by X-ray is injected into the blood vessels of the heart. The X-ray machine rapidly takes a series of images (angiograms), offering a look at the patient’s blood vessels. Coronary angiogram is considered the “gold standard” for diagnosing coronary arterial disease and can cost in excess of \$5,000. According to an article in the New England Journal of Medicine, in a large 2010 study which reviewed angiogram results of 400,000 patients, only 38% of patients (without known CAD) actually had obstructive CAD.

Exhibit 3: Lack of Early Identification of Heart Disease is a Big Problem in Cardiology



Source: Company Reports

By offering a cost-effective, early-stage detection solution, Heart Test believes it will be able to create significant value for the health care system, as the costs of treating acute heart disease far outweigh the costs of early treatment. In fact, heart disease is the biggest single cost to the US health care system, costing over \$216 billion, according to the CDC. The largest portion of direct costs stem from inpatient hospital stays for heart failure, according to an analysis published in the *Journal of Cardiac Failure*.

Heart disease is the leading killer globally. According to the CDC, 1 in 4 Americans die of cardiovascular disease, with one person dying every 36 seconds. 20% of deaths from heart disease in the US are involve individuals under the age of 65. Cardiovascular diseases are also the leading cause of death globally, accounting for 32% of global deaths. The biggest diagnostic gap in heart disease is early identification. 1 in 3 cases is not properly diagnosed until after a heart attack occurs and 50% of men and 64% of women who died suddenly of coronary heart disease had no previous symptoms.

Demographics are likely to put upward pressure on heart disease costs. As life expectancy increases, the average age of the population is expected to increase. According to the HHS, the population age 65 and older increased from 38.8 million in 2008 to 54.1 million in 2019 (a 39% increase) and is projected to reach 94.7 million in 2060. By 2030, more than 20 percent of US residents

are projected to be age 65 and over. Since heart disease is most common in elderly individuals, and that population pool is increasing, the need for early screening for heart disease is likely to increase dramatically.

Heart Test addresses a very large potential market. ECGs are extremely common, with up to 3 million performed every day globally. In the US, it is estimated that over 100 million ECG tests are performed each year. Applications include retail clinics, emergency rooms, cardiology, anesthesiology, endocrinology, insurance, athletics, the military, and pilots.

Heart Test is pursuing a ‘razor + razorblade’ business model. According to Research and Markets the market for ECG hardware exceeded \$5bn in 2020. Leading suppliers include Philips, CardioComm Solutions, Schiller, Nihon Kohden, Mortara, and GE. Heart Test expects to sell its MyoVista device for \$3,000-\$5,000, at the low end compared with other ECG monitors. The market for consumable supplies represents a large additional opportunity, as a single ECG device could be used to perform as many as 20 tests per day. Typically, electrodes are used once and disposed of. Heart Test’s disposable electrodes will carry an ASP on the order of \$10 per test. If a single device is used 3,000 in a year (<10 times per day), revenues from electrodes would equal \$30,000 per device, exceeding capital equipment revenues by a factor of 10 within the first year.

Heart Test expects to resubmit its application for FDA De Novo clearance for MyoVista by April 2023, creating a potential catalyst for the stock. Heart Test began developing the MyoVista in 2015. In late 2019, the company submitted a De Novo application to the FDA for approval of the device, but the FDA ultimately raised concerns that the 343-patient data set the company used was insufficient to establish the probable benefit of the algorithm without a new validation dataset. For its new submission, the company is close to completing enrollment for a new validation study and has enrolled additional enrichment study patients to provide extra data. Once the application is submitted, the FDA’s De Novo classification authorization process generally takes from five to twelve months from the date the application is submitted but can take significantly longer. As soon as the De Novo application for MyoVista is approved, the company will be cleared to begin marketing its device. For modeling purposes, we are currently assuming the company will obtain clearance and be able to begin selling the MyoVista within 12 months of resubmission. FDA approval would represent an enormous milestone for the company and a potentially potent catalyst for the stock. Hence, we view the pending resubmission as a critical step forward and also a potential stock price catalyst.

More cash is needed. In its most recently reported quarter ended Oct 2022, Heart Test reported \$3.1 million in cash on its balance sheet. Its burn rate has been averaging \$1.5 million or so per quarter, giving the company runway through the April 2023 quarter. Clearly, the company will need to raise additional funds in order to continue its operations as it awaits FDA clearance and beyond to marketing its products.

Valuation: HSCS represents attractive risk/reward with a near-term catalyst in view

Based on an NPV analysis, we believe the stock HSCS is worth at least \$3.30 per share. This valuation assumes a modest penetration of the global market for ECG machines of less than 1% by 2026, as well as modest sales of supplies amounting to 3 tests per day per machine. In addition, we use a conservative discount rate of 16% for future cashflows to account for general uncertainty relating to marketing a new product and competition in the marketplace. With the stock currently trading at \$0.87, near its post-IPO lows, we believe the risk/reward is attractive. In addition, the stock could experience a significant boost when the company resubmits its FDA De Novo clearance application, an event the company expects to occur by April of this year.

INVESTMENT RISKS

Risks Related to Financial Condition and Capital Requirements

Need for financing. Heart Test will need to raise substantial additional funding, which may not be available on acceptable terms, or at all. Failure to obtain funding on acceptable terms and on a timely basis may require the company to curtail, delay or discontinue development efforts and other operations. If the company is unable to obtain funding on a timely basis, it may not be able to complete the process of FDA clearance and may need to significantly curtail, delay, or discontinue efforts to launch sales of the MyoVista in the US. Even if the company achieves FDA clearance, it is likely to require substantial additional capital for the sales launch and marketing of the MyoVista. Future funding requirements will depend on many factors including:

- The progress, results, and costs of ongoing and planned studies and, if applicable, clinical trials of the MyoVista as well as any future products and services
- The cost, timing, and outcomes of regulatory review of current and any future products and services
- The cost of the company's future activities, including establishing sales, marketing, and distribution capabilities for the MyoVista
- The costs of preparing, filing, and prosecuting patent applications, maintaining and enforcing intellectual property rights, and defending any intellectual property-related claims
- The level of revenue, if any, received from commercial sales of the MyoVista if the company receives approval for the sales launch of the MyoVista into the US

Dilution. Future sales of a substantial number of shares of Heart Test's Common Stock by existing shareholders as well as newly issued shares could cause its stock price to decline.

Growth and Commercialization Risks

Physician acceptance. The future growth and profitability of Heart Test depend on physician awareness of the MyoVista and on the willingness of hospitals, physicians, patients, and third-party payors to use it. These parties may not use the device unless they are able to determine, based on experience, clinical data, medical society recommendations, and other analyses that the device is safe, effective, and cost-effective on a stand-alone basis and relative to competing products. If the company fails to deliver a device that physicians want to use, its revenue potential, financial results and business may be significantly harmed. Even if Heart Test is able to deliver a superior device and raise physician awareness of the device through effective marketing, physicians tend to be slow in making changes to their medical treatment practices and may be hesitant to select the MyoVista as their preferred diagnostic device for a variety of reasons, including:

- Standing relationships with competing companies and distributors that sell competing devices
- Lack of experience with the MyoVista and concerns that Heart Test is new to market
- Lack or perceived lack of sufficient clinical evidence, including long-term data, supporting safety or clinical benefits
- Time commitment and skill development that may be required to gain familiarity and proficiency with the MyoVista.

Third-party reimbursement/insurer risk. Heart Test's ability to successfully launch sales of the MyoVista in the US and achieve market acceptance of the MyoVista depends on the availability of adequate financial coverage and reimbursement from third-party payors, including governmental payors (e.g., Medicare and Medicaid), managed care organizations and private health insurers. Third-party payors decide which treatments they will cover and then establish reimbursement rates for those treatments. If approved and successfully marketed, the MyoVista may be purchased by hospitals and other providers who will then seek reimbursement from third-party payors for the use of the MyoVista and, in many cases, the decision of whether or not to purchase the MyoVista will be dependent upon whether or not the purchaser will be able to seek reimbursement.

Increasingly, third-party payors are also examining the cost-effectiveness of products, in addition to their safety and efficacy, when making coverage and payment decisions. Third-party payors have also instituted initiatives to limit the growth of healthcare costs using, for example, price regulation or controls and competitive pricing programs. Some third-party payors also require demonstrated superiority, based on randomized clinical trials, or pre-approval of coverage, for new or innovative devices before they will reimburse healthcare providers who use such devices. Additionally, there is no uniform policy for coverage and reimbursement in the US, and coverage and reimbursement can differ significantly from payor to payor. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement rates, but also have their own methods and approval process apart from the Medicare coverage determination process. It is uncertain whether the MyoVista will be viewed as sufficiently cost-effective to warrant coverage and adequate reimbursement levels for use in any given jurisdiction.

Reimbursement systems in international markets vary significantly by country and, within some countries, by region, and reimbursement approvals must be obtained on a country-by-country or region-by-region basis. In certain international markets, a product must be approved for reimbursement before it can be approved for sale in that country. Furthermore, many international

markets have government-managed healthcare systems that control reimbursement for new devices. In most markets, there are private insurance systems as well as government-managed systems.

Risks Related to Product Development and Regulatory Approval

PMA approval. The future success of Heart Test depends on the company's ability to receive regulatory clearance or approval for the MyoVista. If the company does not obtain and maintain the regulatory registrations and clearances for its device, it will be unable to market and sell the MyoVista in the United States, Europe, or other regions.

In the United States, before Heart Test can market a new medical device, or a significant modification to an existing product, it must first receive either approval of a Premarket Approval Application, (PMA), clearance under Section 510(k), or be granted a De Novo classification, in accordance with the Federal Food, Drug, and Cosmetic Act, (FDCA).

The FDA can delay, limit, or deny clearance or approval of a medical device for many reasons, including

- Inability to demonstrate to the FDA's satisfaction that the device is safe and effective for its intended use
- The data from pre-clinical studies and clinical trials may be insufficient to support clearance or approval
- The manufacturing process or facilities may not meet applicable requirements.

Heart Test previously submitted a De Novo application in late 2019. The FDA determined that the Company would need to undertake a new algorithm validation clinical study using patients gathered from institutions that were not part of the studies used for algorithm development. Due to the time of completion of the study, submission of the new validation study results requires a new De Novo submission. The new validation study is currently underway, and the company intends to submit a new De Novo application for the MyoVista later in Fiscal 2023. Additional clinical studies are being conducted as part of the outcome of the previous application process. The De Novo process can be expensive, lengthy, and unpredictable. De Novo classification requests require the performance of at least one clinical trial. Despite the time, effort and cost, Heart Test may not ultimately be successful in completing the review process and its De Novo application may not be granted by the FDA in a timely manner or at all. Any delay or failure to obtain necessary regulatory clearances or approvals could harm the company's business. Furthermore, even if regulatory approvals or clearances are granted, they may include significant limitations on the indicated uses for the MyoVista, which may limit the market for the device in the United States.

510(k) clearances for product upgrades. If and when Heart Test's products are ready for sales launch in the US, modifications to marketed products may require new determinations from the FDA ("510(k) Clearances"), that each device is substantially equivalent to another legally US-marketed medical device thereby authorizing the device to be marketed in the US or may require Heart Test to cease marketing or recall the modified products until clearances or approvals are obtained.

Clinical trials. Clinical studies may be necessary to support future product submissions to the FDA. The clinical trial process is lengthy and expensive with uncertain outcomes, and often requires the enrollment of large numbers of patients, and suitable patients may be difficult to identify and recruit. Delays or failures in clinical studies will prevent Heart Test from launching sales of modified or new products into the US and will adversely affect business, operating results, and prospects.

VALUATION

We see upside to \$3.30 if Heart Test is able to successfully begin marketing its MyoVista machine.

Our price target is based on a NPV which assumes a very modest penetration of less than 1% of the projected \$7 billion global market for ECG machines by 2026. We further assume the company is able to sell \$11,000 in supplies per machine annually and will require an additional \$35 million in capital to reach this level of market share. Adding net cash to the NPV of future operating profit and subtracting estimated additional capital required, we come up with current value for existing shareholders of \$27.1 million, or \$3.30 per share.

We acknowledge that as an untested, early-stage medical device company, Heart Test's valuation is subject to wild uncertainty. To account for this, we use a high discount rate of 16% in our NPV calculation, and a conservative market share forecast of 0.25% by

2026. Given that Heart Test is far along with its technology, already has a working device, and has resubmitted its De Novo application to the FDA, it might appear that our valuation is on the conservative side. Yet, we believe marketing execution could prove a bigger challenge than technology development, given the competitive nature of the medical device market and the entrenched positions of large incumbents. In addition, MyoVista will need to raise substantial funds to carry it through the marketing phase of its product launch. Therefore, we feel conservatism is warranted. Still, our valuation represents 280% upside to the current stock price and is well below the stock's post-IPO high of \$6 reached on August 3, 2022.

Exhibit 4: Heart Test Laboratories, Inc. Valuation, NPV

ECG Equipment Market (2026)	\$7,087,000,000
Projected Market Share (SOM)	0.25%
Projected MyoVista ASP	\$4,000
Number of MyoVistas Sold Annually (2026)	4,429
Projected Annual Supply Revenues per MyoVista Machine	\$11,000
Projected Annual MyoVista ECG Revenues	\$17,717,500
Projected Annual Supply Sales	\$48,723,125
Total Projected Sales (2026)	\$66,440,625
Discount Rate	16%
NPV of Future Sales	\$410,634,271
Projected Operating Margin	15%
Estimated NPV of Future Operating Profit	\$61,595,141
Net Cash	\$511,953
Estimated Additional Capital Required	(\$35,000,000)
Current Value for Existing Shareholders	\$27,107,094
Shares Outstanding	8,211,000
Estimated Value Per Share	\$3.30

Source: Company reports, ResearchAndMarkets.com, Ascendant Capital Markets estimates

Heart Test's share price since IPO has been in a volatile downtrend, hitting an intraday high of \$6 on August 3, 2022, and a low of \$0.71 on January 23, 2023. We believe a key reason for this has been the general market decline, which has hit profitless companies and microcaps, in particular very hard. Notwithstanding, we believe the company is working hard to bring its technology to market, as evidenced by recent announcements of new Current Procedural Terminology (CPT) codes assigned to Heart Test's diagnostic ECG algorithms, a new patent for ECG quantification of echocardiographic measures of diastolic function of the heart using AI methods, as well as a new collaboration with Rutgers University to develop AI-based algorithms. Most significantly, the company anticipates its De Novo application could be resubmitted as early as Q4 FY2023, i.e., by April. If so, this would represent a potential catalyst for the stock, an important milestone for the company, and a significant step toward the marketing of the MyoVista. Though the FDA clearance process is subject to uncertainty, the current valuation seems to heavily discount risks appropriately.

COMPANY

Company Overview

History. Heart Test Laboratories, Inc. was founded in 2007. In 2013, the current management team of Andrew Simpson and Mark Hilz joined the company and began the process of building the company in its current form. In 2015 work began on the MyoVista hardware. In 2018, new advances in Machine Learning permitted the use of the MyoVista's application as an early heart disease detection device. \$50 million of the original funding for the company came from private equity investments by family offices, while \$5 million came from a bridge financing facility in late 2021 and \$6 million came from the company's IPO in June 2022. To date, the company has invested \$60 million to realize its vision of early heart disease detection through ECG scans. The company has offices near Dallas in Southlake, Texas.

Product and Technology. The MyoVista device makes use of the recent understanding in cardiology that most forms of heart disease are associated with LV (Left Ventricle) relaxation abnormalities and diastolic dysfunction. The MyoVista is a 12-lead resting ECG device that features a proprietary algorithm developed to detect cardiac dysfunction in the diastolic phase, specifically slower than normal left ventricular relaxation rates as defined by the American Society of Echocardiology Guidelines.

The MyoVista is also designed to include the capabilities of a full-featured conventional 12-lead resting ECG including analysis using the Glasgow ECG Interpretation Algorithm. Developed by the University of Glasgow in the UK, the 12-lead ECG Analysis Algorithm has been relied upon for more than 35 years and is a widely respected resting ECG interpretive algorithm. The Glasgow Algorithm was developed and has been continuously improved over the years by a team of world-renowned ECG researchers. The Glasgow Algorithm is licensed to the company pursuant to the Glasgow Licensing Agreement.

Exhibit 5: The MyoVista is Simple to Use and Incorporates Standard and Proprietary ECG Algorithms


MyoVista: Simple to Use



New information on heart health plus conventional ECG information in a single test

MyoVista Energy Waveform
Provided for context. Not intended for use in clinical assessment

MyoVista wavECG LV Relaxation Algorithm Results
Provided in indicator and statement form for LV relaxation abnormality

- ✓ Standard 12-lead ECG protocols - no change to clinical workflow or training.
- ✓ Simple easy to interpret algorithm.
- ✓ Significantly improves risk stratification for heart disease.
- ✓ All conventional resting 12-lead ECG information in the same test.



Source: Company Reports

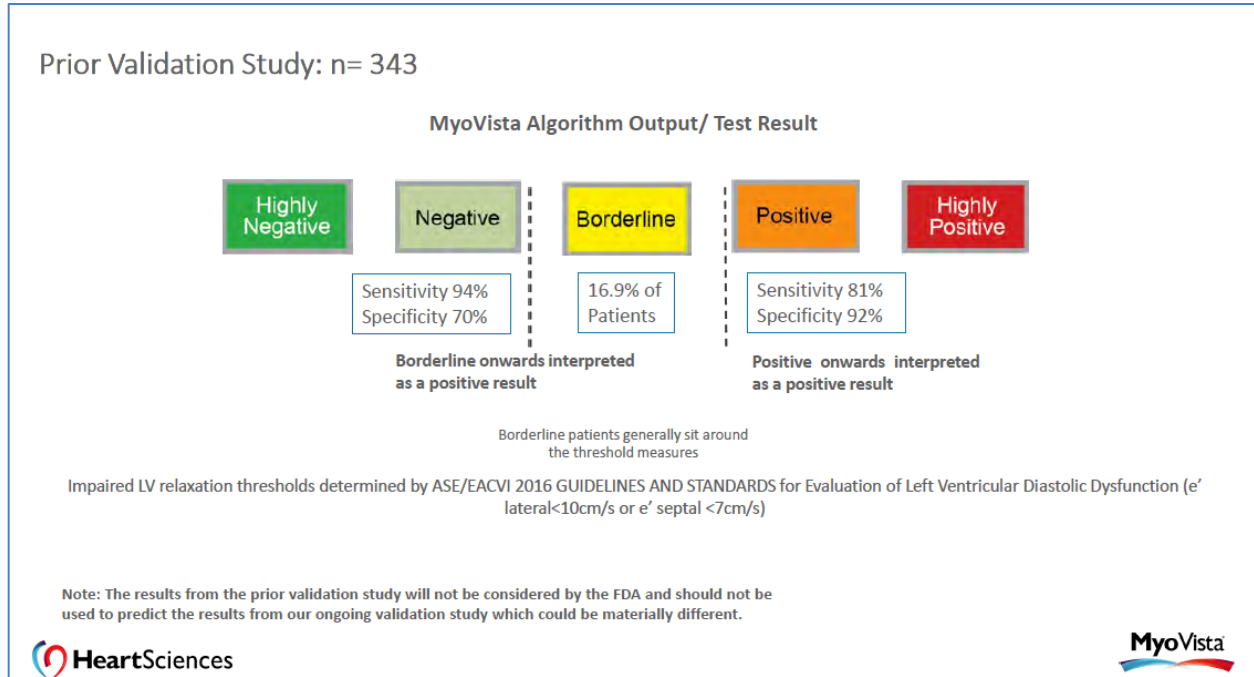
In the MyoVista, Heart Test’s proprietary algorithm and the conventional ECG algorithm are combined as a single test with results presented separately. The MyoVista has a tablet form factor with features including

- A backup lithium-ion battery
- A large 15.6” touch screen with very high resolution
- A touch screen that is designed to function even when the clinician is wearing latex gloves
- A touchscreen keyboard as well as the ability to connect a traditional keyboard
- An HDMI display port to provide an oversized screen as a viewing option
- Electronic medical records integration capabilities
- Interpretive analysis software of the Glasgow Algorithm.

The MyoVista uses electrical information from the heart captured during a standard resting 12-lead ECG test as input to a proprietary AI-based algorithm. The device then extracts additional frequency content from the electrical signal using wavelet transform signal processing to provide additional input to the AI-based algorithm. During a 20-second test, more than 1,000 pieces of extracted data

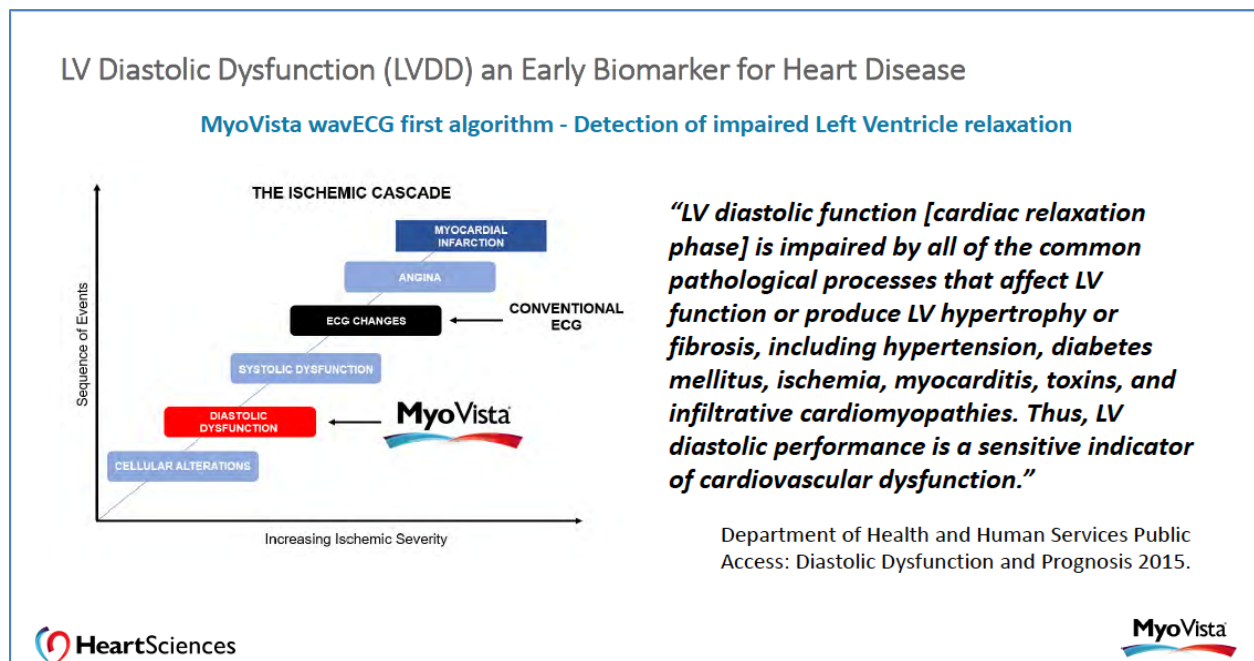
points may be obtained. The software on the device preselects which of the data variables represent the most valuable inputs for the cardiac dysfunction algorithm and uses those to perform an assessment.

Exhibit 6: MyoVista Algorithm Readout



Source: Company Reports

Exhibit 7: Diastolic Dysfunction is one of the Earliest Markers of Heart Disease



Source: Company Reports



The MyoVista Algorithm is designed to detect whether a patient is negative or positive for abnormally slow left ventricular diastolic relaxation rates as defined by the American Society of Echocardiography. The MyoVista gives an intuitive readout indicating risk of heart disease using a simple scale from Highly Negative to Highly Positive. For patients whose results are highly positive or highly negative, the probability that the test is accurate is especially high. For patients whose results are borderline, the results mean that it is likely that the patient is close to the guideline thresholds and therefore the test produces borderline results. The MyoVista has multiple reporting options which can be configured in the settings menu and includes an option for a clinical interpretation report. The clinical interpretation report includes clinical performance information observed in a reference clinical study population to provide context to a patient's wavECG test results and assist interpretation by a physician. The device also performs all conventional ECG assessments including software-based automated ECG interpretation through the incorporation of the Glasgow Algorithm.

Intellectual Property. Heart Test's technology is protected by a patent portfolio as well as trade secrets, which together form a competitive barrier. In the US, Heart Test has six utility patents and one design patent. The company has seven utility patents and fourteen design registrations granted by international jurisdictions, including China, Japan, South Korea, the United Kingdom, France, Germany, and Australia, and has received allowances for further applications from the European Patent Office and in Israel. Finally, the company also has several pending patent applications in several international jurisdictions including Brazil, Canada, India, South Korea, Mexico, and the United Arab Emirates.

Exhibit 8: Heart Test Laboratories, Inc. Intellectual Property Portfolio

Significant Valuable Intellectual Property

- ✓ 8 US granted or allowed patents covering > 100 claims
- ✓ Multiple international granted patents
- ✓ Using ML to create measures of diastolic dysfunction with an ECG
- ✓ Core signal processing patents protect use of key signal processed information
- ✓ Proprietary patented electrode connector system
- ✓ Proprietary wavECG patient database
- ✓ Trademarked in multiple jurisdictions
- ✓ Considerable trade secrets and know-how gathered over years of development work



Source: Company Reports

Clinical Trial Protocols. Clinical trials are almost always required to support a De Novo request and are sometimes required to support a 510(k) submission. All clinical investigations of investigational devices to determine safety and effectiveness must be conducted in accordance with the FDA's investigational device exemption, or IDE, regulations which govern investigational device labeling, prohibit promotion of the investigational device, and specify an array of recordkeeping, reporting and monitoring responsibilities of study sponsors and study investigators.

Studies must be approved by, and conducted under the oversight of, an Institutional Review Board, or IRB, for each clinical site. The IRB is responsible for the initial and continuing review of the IDE and may pose additional requirements for the conduct of the study. If an IDE application is approved by the FDA and one or more IRBs, human clinical trials may begin at a specific number of investigational sites with a specific number of patients, as approved by the FDA.

During a study, the sponsor is required to comply with the applicable FDA requirements, including, for example, trial monitoring, selecting clinical investigators and providing them with the investigational plan, ensuring IRB review, adverse event reporting, record keeping, and prohibitions on the promotion of investigational devices or on making safety or effectiveness claims for them. The clinical investigators in the clinical study are also subject to FDA regulations and must obtain patient informed consent, rigorously follow the investigational plan and study protocol, control the disposition of the investigational device, and comply with all reporting and recordkeeping requirements. Additionally, after a trial begins, the company, the FDA or the IRB could suspend or terminate a clinical trial at any time for various reasons, including a belief that the risks to study subjects outweigh the anticipated benefits.

Clinical studies performed. Heart Test has participated in and/or conducted multiple studies at various sites including at Mount Sinai Health System, West Virginia University, University of California, Los Angeles, and The Baker Heart and Diabetes Institute in Australia. The purpose of conducting the studies was threefold: 1) to collect patient data using the MyoVista to build an effective proprietary algorithm designed to provide early detection of cardiac dysfunction and heart disease, 2) to create proof-of-concept algorithms for determination by Heart Test of the viability of an FDA version of the algorithm, and 3) to use the collected data to conduct research for the potential development of additional future algorithms. Following are summaries of the peer-reviewed articles:

- **Journal of the American College of Cardiology (JACC) April 2018, Sengupta, Kulkarni, Narula, et al.** The article is titled, “Prediction of Abnormal Myocardial Relaxation from Signal Processed Surface ECG” and presents the results from the investigator-initiated clinical study that focused on evaluating the feasibility of the MyoVista as a diagnostic tool for predicting the presence of abnormal cardiac muscle relaxation associated with Left Ventricular Diastolic Dysfunction, or LVDD.
- **Journal of the American College of Cardiology (JACC) August 2020, Kagiya, Piccirilli, Yanamala, et al.** The article titled “Machine Learning Assessment of Left Ventricular Diastolic Function Based on Electrocardiographic Features” presents the results from evaluating the feasibility of MyoVista wavECG technology to provide actual quantitative estimates of the echocardiographic parameter of e' related to myocardial relaxation that can be used to identify LVDD.
- **JACC Cardiovascular Imaging Oct 2021, Potter, Marwick, et al.** The article titled “Machine Learning of ECG Waveforms to Improve Selection for Testing for Asymptomatic Left Ventricular Dysfunction Prompt” focused on developing a screening algorithm using the MyoVista for detection of Left Ventricular Dysfunction, or LVD.
- **European Heart Journal—Digital Health November 2020, Farjo, Yanamala, et al.** The study article titled “Prediction of coronary artery calcium scoring from surface electrocardiogram in atherosclerotic cardiovascular disease: a pilot study” aimed to determine whether machine learning (ML) approaches can aid cardiovascular risk stratification by predicting guideline recommended Coronary Artery Calcium, or CAC, score categories from clinical features and surface electrocardiograms using the MyoVista.
- **Advocate Aurora Health’s Journal of Patient-Centered Research and Reviews.** The publication concluded that the MyoVista technology ECG-derived machine learning model “provides a cost-effective strategy for predicting patient subgroups in whom an integrated milieu of systolic and diastolic dysfunction is associated with a high risk of major adverse cardiovascular events (MACE).

Exhibit 9: Heart Test Laboratories, Inc. Clinical Studies

MyoVista Technology Clinical Studies

Machine Learning Assessment of LV Diastolic Function based on Electrocardiographic Features

- West Virginia, Mount Sinai, UCLA and Windsor Cardiac Center (Ontario)
- 1202 subjects (n=388).
- AUC 94% for estimated e' in prediction of LV diastolic dysfunction based on multiple age- and sex-adjusted reference limits.
- AUC 80%, 84% and 81% for determining abnormal myocardial relaxation, LVDD and systolic dysfunction.

JACC – Journal of the American College of Cardiology
ESC – European Society of Cardiology European Heart Journal
ACC – American College of Cardiology

Prediction of Abnormal Myocardial Relaxation from Signal Processed Surface ECG

- Mount Sinai (New York)
- 188 subjects (n=188).
- 80% sensitivity, 84% specificity with AUC > 90% in the identification of left ventricular diastolic dysfunction.
- Also 82% identification of significant coronary arterial disease.

Abstract 2021

Surface ECG-based Machine Learning Model For Predicting Patient Subgroup at a High Risk for Major Adverse Cardiac Events

West Virginia, Mount Sinai, UCLA and Windsor Cardiac Center

- 1245 subjects (n=518).
- 84% sensitivity, 72% specificity with AUC 84% in prediction of MACE events over a 38-month period.
- Comparable performance to Echo based MACE predictive model. 97% and 79% survival for low and high-risk groups respectively.

Machine Learning of ECG Waveforms to Improve Selection for Testing for Asymptomatic Left Ventricular Dysfunction

- Baker Heart Institute, Australia
- 398 subjects (n=111).
- 85% sensitivity, 72% specificity with AUC 83% in the identification of left ventricular dysfunction.
- Outperformed conventional methods of screening for LVD.

European Heart Journal 2020

Prediction of coronary artery calcium scoring from surface electrocardiogram in atherosclerotic cardiovascular disease: a pilot study

West Virginia, Mount Sinai, UCLA and Windsor Cardiac Center

- 534 subjects (n=106).
- AUC 84% for prediction of CAC=0 score; AUC 87% for prediction of CAC ≥400 score
- Predictive accuracy for MACE events in higher risk patients.

Source: Company Reports

Exhibit 10: Heart Test Laboratories, Inc. Key Researchers and Institutions

Clinical Study Institutions and Key Researchers

Rutgers - Robert Wood Johnson MS, New Brunswick

The Baker Heart and Diabetes Institute, Melbourne, Australia

Harvard - Beth Israel Deaconess, Boston

Mount Sinai- Icahn School of Medicine, New York

Scripps Clinic and Research Foundation Health, San Diego

West Virginia University - Heart and Vascular Institute, Morgantown WV

UTSW UT Southwestern, Clinical Heart and Vascular Center, Dallas

UCLA Medical Center – Harbor, Los Angeles

Thomas Marwick - Director and Chief Executive, Head of Imaging Research at The Baker Heart and Diabetes Institute

Former Head of Cardiovascular Imaging at Cleveland Clinic.

Partho Sengupta - Professor of Cardiology and Chief of Cardiology at Rutgers Robert Wood Johnson Medical School (RWJMS), and Chief of Cardiology at Robert Wood Johnson University Hospital (RWJUH)

Source: Company Reports

New CPT codes. On October 19, 2022, Heart Test reported that the American Medical Association (AMA) issued new industry-first Category 3 CPT codes for novel AI assistive algorithmic ECG risk assessment for cardiac dysfunction. These codes are expected to cover the AI cardiac dysfunction algorithm incorporated in the Company's MyoVista Wavelet ECG Cardiac Testing Device currently in development for FDA De Novo submission and clearance. The codes are in addition to the long-established CPT codes in place for the conventional ECG. CPT Category 3 codes are designed to facilitate the use, adoption, and potential reimbursement of emerging technologies. The new CPT codes go into effect in the CPT codebook on January 1, 2023.

This announcement represents a significant milestone for Heart Test as it validates the importance of Heart Test's AI-based approach to algorithmic interpretation of cardiac dysfunction using an ECG. In addition, having appropriate CPT codes can be critical for healthcare providers to receive reimbursement for their investments in medical devices, and thus critical for device makers to market their products.

De Novo Classification Protocols. Medical device types that the FDA has not previously classified as Class 1, 2, or 3 are automatically classified into Class 3 regardless of the level of risk they pose. The Food and Drug Administration Modernization Act of 1997 established a new route to market for low to moderate-risk medical devices that are automatically placed into Class 3 due to the absence of a predicate device, called the "Request for Evaluation of Automatic Class 3 Designation," or the De Novo classification procedure.

This procedure allows a manufacturer whose novel device is automatically classified into Class 3 to request down-classification of its medical device into Class 1 or Class 2 on the basis that the device presents low or moderate risk, rather than requiring the submission and approval of a PMA application. Prior to the enactment of the Food and Drug Administration Safety and Innovation Act of 2012, or FDASIA, a medical device could only be eligible for De Novo classification if the manufacturer first submitted a 510(k) pre-market notification and received a determination from the FDA that the device was not substantially equivalent. FDASIA streamlined the De Novo classification pathway by permitting manufacturers to request De Novo classification directly without first submitting a 510(k) pre-market notification to the FDA and receiving a not substantially equivalent determination. Under FDASIA, the FDA is required to classify the device within 120 days following receipt of the De Novo application. If the manufacturer seeks reclassification into Class 2, the manufacturer must include a draft proposal for special controls that are necessary to provide a reasonable assurance of the safety and effectiveness of the medical device. In addition, the FDA may reject the reclassification petition if it identifies a legally marketed predicate device that would be appropriate for a 510(k) or determines that the device is not low to moderate risk or that general controls would be inadequate to control the risks and special controls cannot be developed.

Devices such as ECG devices are generally considered to have moderate risk and are generally classified as Class 2 devices. Applicants must submit a notification to the FDA demonstrating that its proposed device is either substantially equivalent to a predicate (existing) device that is a Class 2, or for devices with no existing predicate they will seek to be designated with a De Novo classification. Through previous interactions and correspondence with the FDA, the company determined there was not an existing predicate to the MyoVista AI algorithm and therefore was not eligible to submit an application via the more common 510(k) clearance process. The Company also previously received formal notification from the FDA that the regulatory pathway for MyoVista was determined to be with a De Novo classification.

After initial authorization, any modification that could significantly affect its safety or effectiveness, or that would constitute a major change or modification in its intended use, will require a new 510(k) clearance or depending on the modification, another De Novo classification request, or PMA approval. The FDA requires each manufacturer to determine whether the proposed change requires submission of a 510(k) or a PMA from the outset, but the FDA can review any such decision and disagree with a manufacturer's determination. If the FDA disagrees with a manufacturer's determination, the FDA can require the manufacturer to cease marketing and/or request the recall of the modified device until 510(k) marketing clearance or PMA approval is obtained. Also, in these circumstances, the manufacturer may be subject to significant regulatory fines or penalties. Heart Test has previously submitted and intends to seek authorization to market the MyoVista through the submission of a new De Novo.

Exhibit 11: MyoVista FDA Regulatory Status

MyoVista wavECG: FDA Regulatory Status



➤ MyoVista a new type of ECG:

- FDA De Novo regulatory pathway.
- Class II non-significant risk device.

➤ Prior De Novo submission during 2020:

- Several rounds of interaction with FDA – provides clarity on FDA requirements.
- Modifications have been made to MyoVista.

➤ Resubmission:

- Expected current fiscal year.
- Pivotal study patient recruitment nearing completion (c. 550 patients at 5 U.S. institutions).
- Core-lab work and device performance testing ongoing.



Source: Company Reports

Previous FDA De Novo Submission. Heart Test previously submitted an FDA De Novo classification request in December 2019. As part of this submission, the company provided clinical validation study data for 343 patients which was obtained as part of a larger data collection effort of over a thousand patients at multiple North American institutions and was used to build and subsequently validate Heart Test’s diastolic LV relaxation abnormalities algorithm. The 343-patient clinical validation dataset was created using proportional random splitting of the larger data set.

Although this data was held separate, the FDA stated that random splitting of data into the two datasets is inappropriate and ideally the algorithm development and clinical validation data should be obtained from independent sites with possibly different medical practices and locations in different geographic areas from those of the wider data collection. The company also undertook software modifications to address other FDA comments which caused the FDA to raise concerns over the potential introduction of algorithm bias and the FDA ultimately determined that the 343-patient data set was insufficient to establish the probable benefit of the algorithm without a new validation dataset. The FDA therefore requested that company evaluate the performance of the device using a new validation dataset to validate the algorithm.

De Novo Resubmission. Based on feedback from the previous De Novo submission and subsequent interaction with the FDA, multiple changes have been incorporated into the device and associated documentation, including software, user interface changes, documentation, test report information, layout, style, and language.

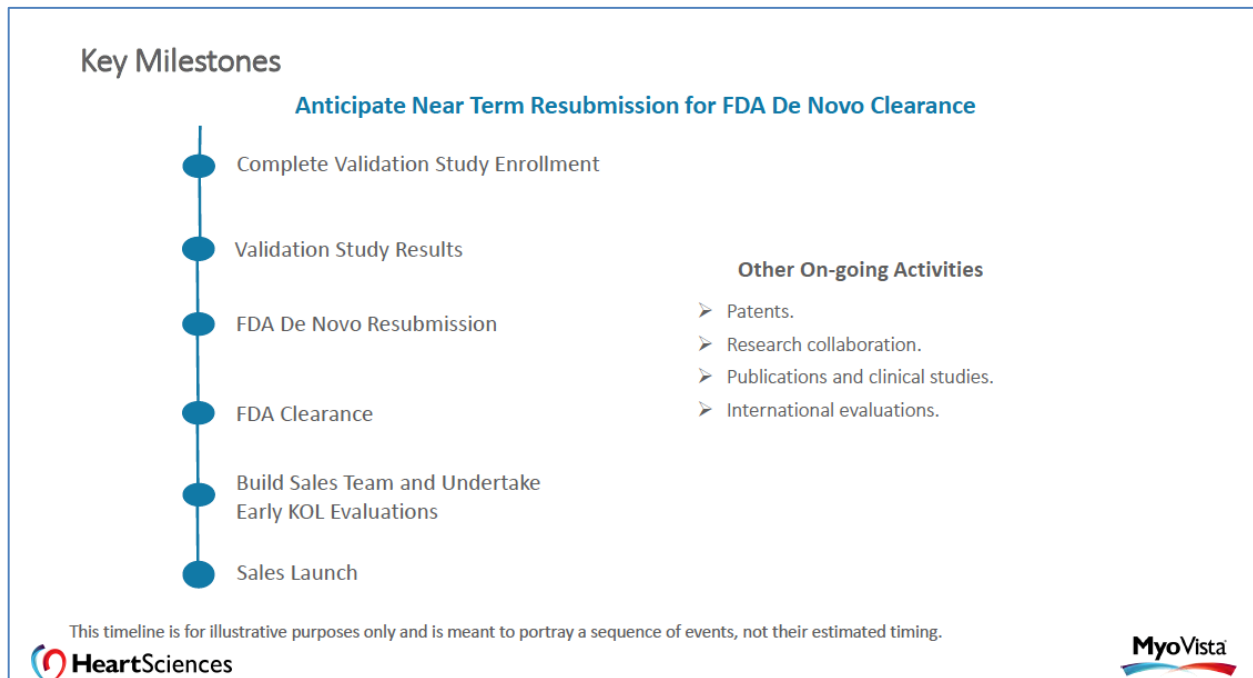
The majority of the patients have already been recruited for a new, pivotal clinical validation study for a proposed FDA De Novo resubmission. The company submitted the design of the new study to the FDA for review prior to its commencement. The study is expected to be a 575-patient clinical validation study. The FDA agreed that the study design should be acceptable and would be expected to provide statistical information on which the FDA can effectively evaluate the performance results of the MyoVista. The study is at the following institutions: Rutgers University (New Jersey), which is acting as the core lab, Beth Israel Hospital

(Massachusetts), Scripps Health (California), Einstein Health (Pennsylvania), Montefiore Medical Center (New York) and UT Southwestern (Texas) which are conducting patient recruitment.

Since the prior De Novo submission, Heart Test has continued to explore algorithm improvements, through the extraction of additional data points from the ECG signal and implementation of the latest AI techniques, which may be incorporated into the algorithm used for final clinical validation. Additionally, the company has been updating compliance standards and verification and validation testing, including electromagnetic compatibility or EMC testing due to testing guideline changes. Such testing is required for all FDA electronic medical devices.

Heart Test currently expects to resubmit for FDA De Novo clearance in the fiscal year ending April 30, 2023, and the FDA’s De Novo classification authorization process generally takes from five to twelve months from the date the application is submitted but can take significantly longer.

Exhibit 12: Heart Test Laboratories, Inc. Regulatory Milestones



Source: Company Reports

Market Opportunity

Heart Disease Prevalence. Statistics published by the US Centers for Disease Control and Prevention, or CDC, show that in the United States heart disease is the leading cause of death for men, women, and people of most racial and ethnic groups. According to the CDC, one person dies from cardiovascular disease every 36 seconds and heart disease accounts for approximately one in four deaths. In 2018, 30.3 million US adults were diagnosed with heart disease including 18.2 million adults with CAD. Approximately 605,000 patients in the US have a heart attack each year with approximately 20% of deaths from CAD occurring in adults less than 65 years old. The scale of the problem is similar worldwide. In 2020, the World Health Organization confirmed that heart disease has remained the leading cause of death at the global level for the last 20 years. Ischemic heart disease now represents 16% of global deaths and an estimated 17.9 million people died from cardiovascular diseases in 2019, representing 32% of all global deaths.

Cost of treating acute heart disease. According to the CDC, cardiovascular disease remains the biggest cost for the US healthcare system at approximately \$216 billion per year, or one in every six healthcare dollars spent in the United States. The cost of treating acute cardiac events and heart failure is especially high in comparison to preventative treatment.

Early diagnosis gap. The significant diagnostic gap in heart disease is early identification. Heart disease often remains asymptomatic for many years as the disease progresses until it reaches an acute stage, at which point many patients have a heart attack or die without a prior diagnosis of disease.

Frontline physicians face a significant challenge in identifying cardiac disease early. According to the 2018 National Ambulatory Medical Care Survey, 72% of office visits involved patients having one or more of the main cardiac risk factors of hypertension, hyperlipidemia, diabetes, or obesity. In the absence of a low-cost, front-line medical device that is effective at screening for heart disease, frontline healthcare providers rely predominantly on a patient's risk factors. Despite poor sensitivity and limited ability to identify cardiac dysfunction associated with structural and ischemic disease, conventional ECG tests remain widely used by frontline physicians. As a result of its current limitations, many patients with heart disease go undiagnosed, and many patients referred to cardiology for subsequent testing do not have heart disease.

In 2012, the USPSTF stated that there is no good evidence that an ECG helps physicians predict heart risks in people with no symptoms any better than traditional considerations such as smoking, blood pressure, and cholesterol levels, acknowledging the diagnostic gap that currently exists. Governments, healthcare providers, and third-party payors are focused on shifting the diagnosis and management of heart disease to earlier stages where better patient outcomes can be delivered at lower cost. However, to make substantial progress in improving patient outcomes at lower costs, the existing diagnostic gap needs to be closed.

Changing Demographics. Heart disease is most commonly found in individuals aged 65 and older. According to the Organization for Economic Co-operation and Development, advances in the field of medicine have led to an increase in life expectancy which, as of 2021, was estimated to average 79.1 years for a person in the US, up from 75.2 years in 1990. As life expectancy increases, the average age of the population is expected to increase. According to the HHS, the population aged 65 and older increased from 38.8 million in 2008 to 54.1 million in 2019 (a 39% increase) and is projected to reach 94.7 million in 2060. By 2030, more than 20 percent of US residents are projected to be age 65 and over. Since heart disease is most common in elderly individuals, and that population pool is increasing, the opportunity for an early diagnostic solution such as the MyoVista is significant.

Growing ECG Market . The demand for electrocardiograph devices and related supplies such as electrodes is on the rise worldwide. Despite the limitations of the conventional ECG and healthcare guidance around the world that recommends against its use for screening, in the absence of a better alternative, the ECG remains a ubiquitous and widely used test throughout healthcare including non-cardiology settings. It is estimated that as many as 3.0 million ECGs are performed worldwide every day, making it one of the most commonly used diagnostic tests in healthcare and a fundamental tool in clinical practice. It is estimated that more than 100 million ECGs are performed each year in the United States alone. The 2018 National Ambulatory Medical Care Survey reflected that office-based patient care physicians, excluding anesthesiologists and federal facilities such as VA clinics, ordered or provided 27 million ECG tests and four million stress ECGs during office visits and the 2017 National Hospital Ambulatory Medical Care Survey showed that during ambulatory care visits to hospital emergency departments, an additional 28 million ECG tests were ordered or performed by hospital emergency departments.

According to Markets and Markets, approximately 770,000 ECG devices were estimated to have been sold worldwide in 2015. We expect changing demographics, such as the aging population and increasing rates of obesity, to contribute to even greater numbers of cardio-related testing, and therefore ECG devices and supply usage, over the coming years. According to the Markets and Markets report, Diagnostic ECG Market (2019-2024), the global diagnostic ECG market including supplies is approximately \$7.5 billion per year and projected to be valued at \$10.3 billion in 2024 with an expected 6.4% compounded annual growth rate, or CAGR.

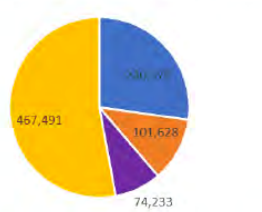
Exhibit 13: ECG Market Size

Scale of Market Opportunity is Enormous

More than 100 million ECG tests and 10 million Echos just in the USA

860 million Ambulatory Care Office Visits in USA
Significant Proportion with Cardiac Risk Factors



Chronic Conditions Present at Office Visits



Condition	Count
Hypertension	467,491
Diabetes	101,628
CAD, CHD, MI history, CHF	74,233
Others	316,671

MyoVista positioned as the bridge between ECG and Echo for point-of-care use

- ECG testing ubiquitous and growing despite general guidance against its use for screening.
- Echo testing on the increase in USA and worldwide – partly due to inherent weakness of ECG. Increasing system costs worldwide and waiting lists internationally.
- High incidence of patients with risk factors for heart disease – ideal candidates for a MyoVista test.

Source: National Ambulatory Care Annual Survey 2018

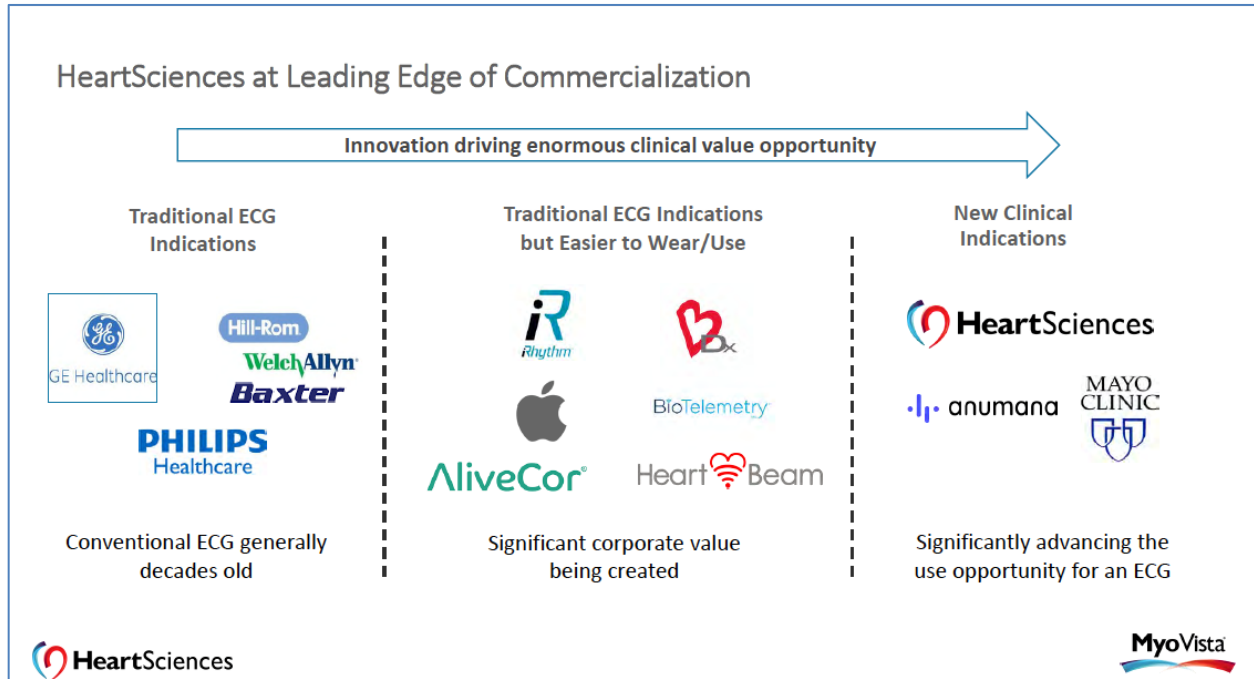
Source: Company Reports

Competition. There are many medical device companies, biotechnology companies, public and private universities, and research organizations actively engaged in the research and development of products that may be similar to the MyoVista. Competitors could include traditional ECG manufacturers such as GE, Philips, and Nihon Kohden Corporation which may seek to innovate due to competition from Heart Test, and new competitors that also see the opportunity to finally innovate in a market that has a significant need for improved products and technological change. The current ECG device manufacturers with the greatest market share are GE, Philips, and Hill-Rom Holdings, Inc., or Hill-Rom.

Additional competitors that are using AI to innovate in electrocardiography include:

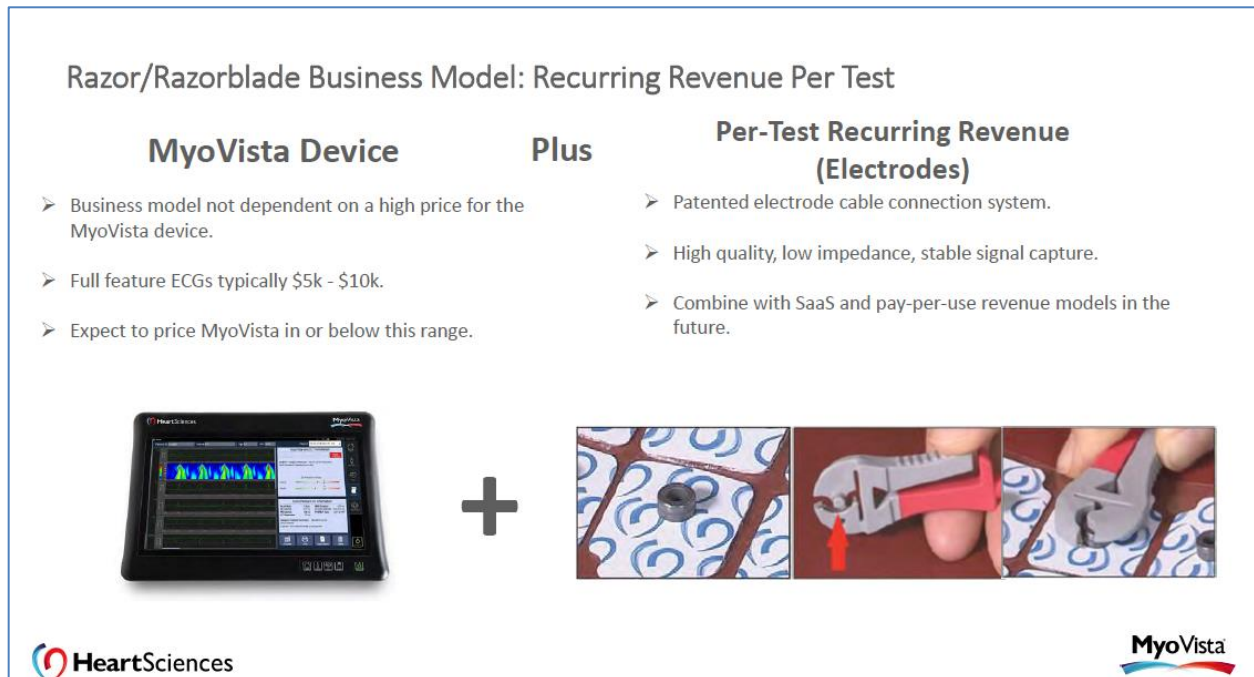
- **AliveCor Inc.** A commercial stage developer of cardiac monitoring devices and applications for heart health monitoring. AliveCor’s ECG recorder has received FDA clearance.
- **Heart Output Input, Inc., or Heartio.** A development stage, digital diagnostic utilizing AI in a cloud-based software tool used in conjunction with electrocardiograms to help emergency providers more effectively stratify patient risk and make admit/discharge decisions. Heartio currently does not have any FDA clearance or authorization.
- **Corvista Health Inc.** A development stage ECG device company with a proprietary platform focused on diagnosing heart failure, coronary artery disease, and pulmonary hypertension. Corvista currently does not have any FDA clearance or authorization.
- **Anumana Inc.** A development stage company funded by the Mayo Clinic focused on developing AI-enabled ECG algorithms for physician use, integrating point-of-care applications into existing workflows. Anumana currently does not have any FDA clearance or authorization.

Exhibit 14: Heart Test Laboratories, Inc. Competitive Landscape



Source: Company Reports

Exhibit 15: Heart Test Laboratories, Inc. Business Model



Source: Company Reports

Business Overview

Business Model. Heart Test's business model is to sell the MyoVista device and the use of proprietary supplies (i.e., disposable electrodes) for each test. The electrode connection system is patented, and the company believes the electrodes are superior quality and facilitate high-quality, stable ECG signal capture. Because new electrodes are needed for each test, the proprietary electrodes, if purchased, would provide recurring per-test revenue for each MyoVista device sold.

A major brand full-featured, resting 12-lead ECG, such as GE and Phillips, typically costs between \$5,000 to \$10,000. The company expects to sell its MyoVista device for \$3,000-\$5,000, i.e., at the low end of competitor pricing. The market for consumable supplies represents a large additional opportunity, as a single ECG device could be used to perform as many as 20 tests per day. Heart Test's proprietary electrodes will carry an ASP on the order of \$10 per test. If a single device is used 3,000 in a year (<10 times per day), revenues from consumables would equal \$30,000 per device, exceeding capital equipment revenues by a factor of 10 within the first year.

Go-to-market strategy. Heart Test intends to develop a direct sales force to target hospitals, physicians' offices as well as large retail healthcare organizations. The company also intends to use technical presentations, peer-reviewed clinical data, and reference sites to achieve penetration of these markets. Finally, Heart Test expects to expand its medical advisory board, conduct clinical trials with key opinion leaders (KOLs), to generate the necessary clinical evidence in various healthcare settings, as well as establish reference sites among these customers.

Heart Test plans to participate in healthcare industry tradeshow events in addition to limited advertising in key medical publications and targeted social media campaigns to increase awareness of MyoVista and its benefits. The company will also consider offering potential purchasers different financing options or assist them with certain costs related to the MyoVista such as up-front costs related to purchasing the device or a licensing model charging a monthly fee, in line with common practice in healthcare.

Potential applications. Conventional ECGs are used throughout healthcare in almost every clinical setting including clinics, doctor's offices, urgent care centers, and hospitals. In many of those settings, the additional information on cardiac dysfunction that the MyoVista is designed to provide, in addition to the conventional ECG information provided, could be extremely valuable. The MyoVista's range of applications and potential uses are vast, and include:

- **Primary care.** Front-line cardiac testing/referral tool, heart disease screening
- **Retail Healthcare.** Access to ECG testing at retail sites such as CVS, Walmart, and Walgreens
- **Emergency Departments.** Enhanced ECG testing for emergency room patients
- **Cardiologists.** Prescreening cardiology patients
- **Hospitals.** In-patient testing or testing prior to discharge, particularly in cardiac wards
- **Surgery.** Pre-anesthesia testing, pre/post-intervention
- **Life Insurance testing.** ECGs are sometimes required in connection with the issuance of life insurance policies
- **Specialty Environments.** Screening for conditions such as, cardiomyopathy, cardiac oncology, drug trials, heart failure, and diabetes
- **Athlete testing.** Cardiac screening programs for athletes.

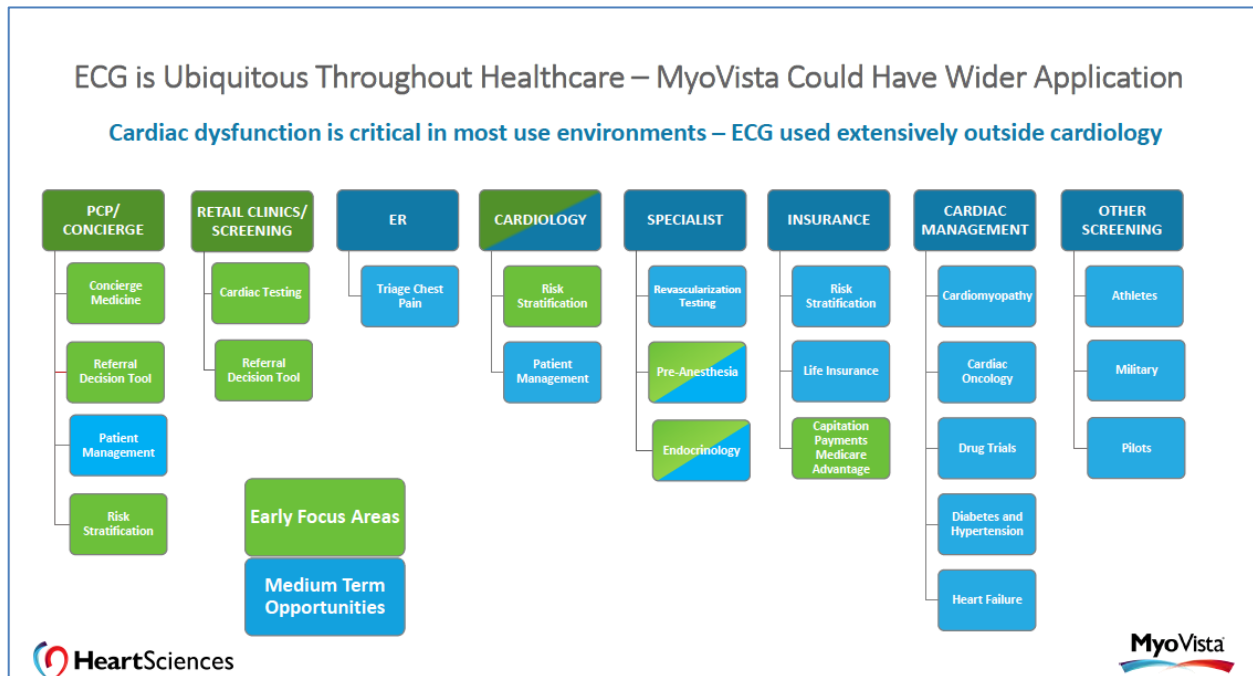
Early target markets. Initially, Heart Test's focus markets will be in the US and will include: 1) cardiology, 2) primary care providers that serve upper to middle income regions including concierge medicine providers, 3) retail clinics and cardiac screening providers, and 4) insurers with significant numbers of Medicare Advantage patients:

- **Cardiology.** According to the American College of Cardiology, there are approximately 23,000 cardiologists in the US. The company does not believe that cardiology will be the principal market for MyoVista as cardiologists diagnose specific heart disease conditions rather than screen for heart disease. Nonetheless, Heart Test intends to have an early focus on leading cardiologists as building advocacy through respected cardiologists will be important as the company seeks to establish its new technology. Heart Test intends to hire sales representatives that have experience presenting new medical devices to cardiologists. The initial focus will be on cardiology centers of excellence and working to generate sales and daily use at

these institutions. The field team will also act as a liaison with Heart Test clinical staff as clinical study opportunities present themselves. The company believes that building clinical evidence, particularly for specific clinical indications for use, such as hypertensive patients, will be a key pillar not only in its discussions with payors, but also as a driver for competitive differentiation and adoption.

- **Primary Care.** According to the HHS, there are approximately 209,000 primary care physicians in the US, not including pediatricians. The 2018 National Ambulatory Medical Care Survey showed that there were 860 million visits to nonfederal office-based patient care physicians of which approximately 50% were to primary care physicians.
- **Concierge Medicine.** Concierge medicine, wherein patients pay an annual retainer for a guaranteed level of service, is growing rapidly in the US. According to a 2021 report by Research and Markets, the US concierge medicine market is expected to reach \$10.0 billion by 2028 and is expected to expand at a CAGR of 9.4% from 2021 to 2028. In 2016, there were approximately 12,000 physicians that provide some level of concierge services with over half being either family medicine or internal medicine.

Exhibit 16: ECGs Applications Extend Beyond Cardiology



Source: Company Reports

Informal feedback to date from concierge physicians and primary care physicians that serve upper to middle-income regions indicates that a patient pay charge for utilizing the MyoVista would be generally accepted, which creates revenue potential and value for the physician. This would be in addition to reimbursement for the conventional ECG test provided by the MyoVista. The company intends to initially hire sales representatives that will focus on these physicians in densely populated middle-income to affluent regions of the US. Additionally, primary care and concierge medicine clinics that are not hospital-based usually have flexible procurement processes and physicians have greater autonomy related to purchasing decisions for lower-cost capital equipment.


Exhibit 17: Heart Test Laboratories, Inc. Sales and Marketing Channels

Early Focus on Front-Line Referral Testing

- Direct Sales Force in USA
- Distributors Internationally
- CPT codes already in place

Focus	Rep Location
Cardiology	Regional
PCP/ Concierge	Regional
Retail Clinics/ Screening	HQ

209,000 PCPs in the USA




Cardiology


- Credibility and research.
- Focus - centers of excellence.

PCP/ Concierge Medicine

- High concentration in major states.
- Initial focus on middle to upper income regions – patient pay opportunity.
- Physician owned facilities – procurement autonomy.

Retail Clinics and Screening





Source: Company Reports

Competitive Advantages. Given FDA clearance of the MyoVista and sufficient funds to launch sales of the MyoVista in the US, Heart Test’s competitive advantages are as follows:

- **Price competitiveness.** A major brand, full-featured, resting 12-lead ECG typically costs between \$5,000 to \$10,000. Heart Test anticipates pricing the MyoVista at the low end of the range for a good-quality conventional ECG from a mainstream manufacturer.
- **Ease of use.** The conventional ECG is the most common cardiac test, is used in almost all areas of healthcare, and is often performed by a physician assistant or a nurse, rather than a physician. The MyoVista is designed to provide both conventional ECG information and proprietary cardiac dysfunction information in a single test, using standard 12-lead ECG testing protocols with standard lead placement. This should enable the MyoVista to fit into existing testing pathways, make it easy to use, and, consequently, easy to train people to use, thereby lowering barriers to adoption.
- **Cutting-edge positioning.** There have been very few significant changes in the efficacy and indications for use of an ECG for many decades. Heart Test intends to position the MyoVista at the forefront of electrocardiography, which could attract healthcare providers.
- **Health system savings.** The MyoVista could potentially generate significant cost savings to healthcare systems by improving earlier diagnosis of heart disease before it reaches an acute stage and reducing unnecessary referrals to cardiology that lead to unnecessary testing.
- **Physician Profitability.** The MyoVista could offer primary care physicians a significant advance in their ability to assess patient heart health. Even based on low usage and competitive pricing, the capital cost of the MyoVista could potentially be recouped quickly. The company also expects to provide financing options (through third parties) which would defer upfront capital costs to acquire the device. In high use environments such as a cardiac screening clinic, hospital or family practice office, the financial returns could be significant, especially if additional reimbursement is available. Heart Test intends to develop financial models demonstrating the potential profitability of the device and to establish reference sites.

- **Razor-razorblade business model.** In addition to MyoVista device sales, Heart Test expects to generate recurring supplies revenue from the sale of its proprietary electrodes, which are disposable and single-use for each test. Unlike a conventional ECG, the MyoVista is designed to analyze frequency content from the heart's electrical signal, and the company has developed a patented cable connection and high-quality electrode system that is proprietary and must be used when performing a MyoVista test. With recurring supply revenues provided from each test, the company expects to avoid the need for high device pricing, which, in turn, should lower barriers to adoption.

Manufacturing. At this time, the company has fully functional hardware versions of the MyoVista, which have also been used in most of its medical clinical studies. Heart Test intends to scale its manufacturing via the use of contract manufacturers and has engaged Benchmark Electronics, a NYSE-listed US-based medical device manufacturing organization that is FDA Registered and ISO 13485 Certified and has over 30 years of product manufacturing experience.

Research and Development. Heart Test's R&D staff designs the hardware, software, and AI-based algorithms. Hardware development assistance is provided by outside consulting firms. The company internally develops the signal-processing software elements with outside assistance. The user interface elements of the software are designed by Heart Test with the assistance of outside consultants. The data science work necessary to build the AI-based algorithms is performed both internally and externally using outside consultants. Incorporation of all software elements into the MyoVista hardware is performed internally. Heart Test currently employs five full-time R&D staff.

Management Team. Heart Test's senior management is comprised of veterans with deep experience in management, technology, finance, product development, and regulatory affairs. Key individuals include:



- **CEO, Andrew Simpson.** Andrew Simpson has served as the President and Chief Executive Officer of Heart Test since March 2022. Mr. Simpson has also served as the Chairman of the Board of Directors since June 2013, and as a director since July 2012. From 2006 to 2010, Mr. Simpson served as Group CEO of The Peel Group, a large private company that at the time had \$8 billion of assets across the real estate, ports, airports, energy, media, telecoms, and the environmental sectors. He was a main board director and Managing Director of Speedy Hire plc from 2003 to 2006 (during which time it became a FTSE 250 company) where he oversaw the expansion of the group's Equipment Rental Division and was responsible for seventeen acquisitions and several non-core divestments. Mr. Simpson qualified as a Chartered Accountant with Price Waterhouse and spent eight years working in investment banking at Rothschild, advising on a wide variety of merger and acquisition transactions, debt and equity fundraisings, IPOs, and other advisory assignments.
- **COO, Mark Hilz.** Mark Hilz has served as the Chief Operating Officer and Secretary of Heart Test since March 2022 and has also been a director of the Company since June 2013. Mr. Hilz served as the Chief Executive Officer of the Company from June 2013 until March 2022. Mr. Hilz has over 30 years of experience as a President and/or CEO of multiple startup companies. He was previously CEO of INX Inc., a technology infrastructure consulting company. INX Inc. grew to \$400 million in revenue and listed on the Nasdaq before being acquired in December 2011. Prior to that, Mr. Hilz founded and was CEO of a technology logistics outsourcing firm, PC Service Source Inc., that grew to over \$160 million in revenue. Mr. Hilz raised the startup capital from traditional venture capital sources and after four years of operations took PC Service Source Inc. public on the Nasdaq. Mr. Hilz's experience includes raising venture capital as well as multiple successful public offerings and numerous merger and acquisition transactions as both a buyer and a seller.
- **CFO & Treasurer, Danielle Watson.** Danielle Watson has served as the Chief Financial Officer of Heart Test since April 2022. Danielle previously served as the company's Financial Controller starting in November 2021. Before joining the company, Ms. Watson held senior leadership roles at Moss Adams, LLP from November 2007 to November 2021 where she provided audit and assurance services to both public and privately held companies with an emphasis in financial reporting, consolidations, strategic planning, purchase price accounting, and SEC reporting.
- **VP of R&D, Aaron Peterson.** Aaron Peterson has 25 years of R&D and product development experience in the areas of cardiac rhythm, neurostimulation, and electrocardiography-related devices. Mr. Peterson has served as Director of Systems Engineering at St. Jude Medical, and Manager of R&D at Boston Scientific.

- **VP of Clinical & Regulatory, Carol Krieger.** Carol Krieger has over 30 years of clinical and regulatory experience, including over 100 FDA submissions. Ms. Krieger has served as Director of Clinical QA and Compliance at Becton Dickenson, VP of Clinical Ops at Bio Connect, and VP of Quality and Regulatory at Alfa Wasserman.

Exhibit 18: Heart Test Laboratories, Inc. Senior Management Team

Senior Management Team

<div style="background-color: #0070C0; color: white; padding: 5px; text-align: center; font-weight: bold;">Andrew Simpson <i>Chairman and CEO</i></div> <ul style="list-style-type: none"> ➢ Peel Group CEO – c. \$8 billion of assets. ➢ Speedy Hire Plc Main Board Director and Division MD – Company joined FTSE 250 during that time. ➢ Rothschild - Investment Banker. ➢ Price Waterhouse - Chartered Accountant. 	<div style="background-color: #0070C0; color: white; padding: 5px; text-align: center; font-weight: bold;">Mark Hilz <i>COO</i></div> <ul style="list-style-type: none"> ➢ INX CEO/Founder - Technology consulting, revenue \$400m NASDAQ listed with multiple public offerings. Sold in 2011. ➢ PCSS CEO/Founder – Tech logistics outsourcing, revenue \$160m; NASDAQ listed, multiple public offerings. ➢ HCP CEO/Founder - Technology product distributor \$10m in revenue. Sold - 1988. 	<div style="background-color: #0070C0; color: white; padding: 5px; text-align: center; font-weight: bold;">Danielle Watson <i>CFO</i></div> <ul style="list-style-type: none"> ➢ Over 15 years of accounting in both the public accounting and private sector. ➢ Extensive public accounting experience in preparation and audit of with public company filings including 10Ks, 10-Qs, 8-Ks, and other registration statements. ➢ Certified Public Accountant. ➢ Master of Science in Accounting from University of Texas at Arlington. ➢ Bachelors Degree in Accounting from Texas Christian University. 	<div style="background-color: #0070C0; color: white; padding: 5px; text-align: center; font-weight: bold;">Aaron Peterson <i>VP R&D</i></div> <ul style="list-style-type: none"> ➢ 25 years of Engineering and product development in the areas of Cardiac Rhythm Management, Neurostimulation and electrocardiography-based devices. ➢ St Jude Medical - Director of Systems Engineering. ➢ Boston Scientific - Manager R&D. ➢ Master's Degree in Computer Science from Utah State University. 	<div style="background-color: #0070C0; color: white; padding: 5px; text-align: center; font-weight: bold;">Carol Krieger <i>VP Clinical & Regulatory</i></div> <ul style="list-style-type: none"> ➢ 30 years of clinical and regulatory experience including over 100 FDA submissions. ➢ Becton Dickenson - Director of Clinical QA and Compliance. ➢ Bio Connect VP of Clinical Ops ➢ Alfa Wasserman - VP Quality and Regulatory. ➢ MS Jurisprudence Seton Hall University. ➢ MBA, Montclair State University. ➢ BS Degree Rutgers University.
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Source: Company Reports

FINANCIALS

Overview. Current management has been with the company since 2013. In its startup phase, Heart Test was funded by approximately \$50 million in private investments from family offices. In December 2021, Heart Test issued bridge notes and bridge warrants to purchase 1,365,960 shares of Common Stock. The company received net proceeds of \$4.2 million from the bridge financing. On June 16, 2022, the company went public on the Nasdaq and issued 1.5 million shares to raise \$6.4 million. In total, the company has invested approximately \$60 million to develop its technology. The company has an April fiscal year, and its most recently reported quarter is Q2 FY2023 ending October 31.

Q2 FY2023 (October) results. On December 16, 2022, Heart Test reported its financial results for the second quarter of fiscal year 2023 ended October 31, 2022. Highlights were as follows:

- The company continues to target an FDA De Novo resubmission around the current fiscal year end (i.e., by April), assuming positive results for its validation study.
- The company is close to completing enrollment for its validation study and has enrolled additional enrichment study patients to provide extra data.
- The company was granted a US patent for ECG quantification of echocardiographic measures of diastolic function of the heart using AI methods, as well as the grant of a European patent covering its proprietary electrode and connector system.
- The American Medical Association issued new industry-first Category 3 CPT codes covering novel AI assistive algorithmic ECG risk assessments for cardiac dysfunction, which would include the MyoVista.

- The company entered into a multi-year collaboration agreement with Rutgers University to develop AI-based algorithms, which it expects will accelerate its development pipeline for further expanding the clinical value of an ECG.
- An independent study utilizing Heart Test’s proprietary MyoVista technology was published in Advocate Aurora Health’s Journal of Patient-Centered Research and Reviews, which concluded that the MyoVista technology ECG-derived machine learning model provides a cost-effective strategy for predicting patient subgroups with a high-risk of major adverse cardiovascular events.
- There were no meaningful revenues for the second quarter of 2023.
- Operating expenses were up \$430 thousand sequentially to \$1.8 million due to increased R&D spending
- Cash used for operations amounted to \$1.1 million for the quarter.
- As of October 31, 2022, cash and cash equivalents were \$3.1 million.
- The Company believes it has sufficient capital to support operations through resubmission of its application for FDA De Novo clearance.

Income Statement. As a development phase company, Heart Test has yet to generate meaningful revenues. We are currently forecasting first revenues in the first half of CY2024, i.e., a year from now. This is contingent on the company successfully resubmitting its De Novo application to the FDA and receiving clearance to market its device. The company is relatively disciplined with expenses, having spent \$2.6 million and \$4.7 million on operating expenses in FY2021 and FY2022, respectively. The majority of these outlays were for Research & Development. In its most recent quarter ended October 31, 2022, the company reported operating expenses of \$1.8 million, with \$0.8 million spent on R&D and the rest spent on SG&A. In FY2025, we expect substantial increases in operating expenses as the company staffs its marketing rollout and continues to invest in clinical studies to demonstrate the efficacy of the MyoVista for new applications.

Exhibit 19: Heart Test Laboratories, Inc. Annual Historical and Projected Financial Metrics

Income Statement (\$ mils except EPS)	2020	2021	2022	2023	2024	2025
Fiscal Year End: April 30	FY-A	FY-A	FY-A	FY-E	FY-E	FY-E
Total revenue	0.1	0.0	0.0	0.0	0.4	5.4
Loss from operations	(3.8)	(2.6)	(4.7)	(6.8)	(9.0)	(9.6)
Net loss	(3.8)	(2.5)	(4.8)	(6.8)	(9.0)	(9.6)
EPS Diluted	(1.15)	(0.74)	(1.45)	(0.94)	(1.10)	(1.17)
Net cash used in operating activities	(3.8)	(2.5)	(3.6)	(7.3)	(8.9)	(9.3)

Source: Company Reports, Ascendant Capital Markets Estimates

Balance Sheet. Heart Test’s balance sheet for its most recent quarter showed a cash balance of \$3.1 million. This should give the company enough money to make it through its anticipated De Novo submission in the April 2023 quarter, but the company will clearly need to raise new funds to keep going beyond that.

Cash-flow Statement. Heart Test has a relatively modest cash burn rate for a public company of less than \$2 million per quarter currently. The company spent \$2.5 million and \$3.6 million on operations during FY2021 and FY2022. We forecast an increase to \$6.8 million in FY2023 due to higher R&D spending, as well as greater SG&A due to expenses related to financing and being a public company. Still, we view this as a moderate cash-burn rate, given the potential of the MyoVista and Heart Test’s phase of development. Once FDA clearance is received, we expect the company will need to substantially increase its pace of investment in order to support its marketing roll-out.

Exhibit 20: Heart Test Laboratories, Inc. Financial Metrics

Exchange:	NasdaqCM
52-week Range:	\$0.71-6.00
Shares Outstanding (million):	8.2
Market cap (\$million):	\$6.8
EV (\$million):	\$4.8
Debt (\$million):	\$1.1
Cash (\$million):	\$3.1
Avg. Daily Trading Vol. (\$ 000s):	\$30.3
Float (million shares):	6.2
Short Interest (thousand shares):	24.4
Dividend, annual (yield):	NA

Source: Company Reports, Yahoo Finance, Ascendant Capital Markets Estimates

Initiating Estimates. We are initiating estimates of (\$0.22) for Q3 FY2023 (Jan) and (\$0.22) for Q4 FY2023 (Apr) on zero revenues. This puts us slightly below consensus, which is at (\$0.20) for Q3 FY2023 and (\$0.15) for Q4 FY2023. On an annual basis, we are initiating estimates of (\$0.94) for FY2023 and (\$1.10) for FY2024 on revenues of \$0 and \$0.4 million, respectively. Consensus estimates call for EPS of (\$0.78) for FY2023 and (\$1.07) for FY2024 on revenues of \$0.2 million. For FY2025, we are initiating estimates of \$(1.17) on revenues of \$5.4 million, versus consensus estimates of \$(1.85) on revenues of \$6 million.

Exhibit 21: HSCS Consensus Expectations

	Revenue (\$ million)				EPS		
	<u>FY2023E</u>	<u>FY2024E</u>	<u>FY2025E</u>		<u>FY2023E</u>	<u>FY2024E</u>	<u>FY2025E</u>
Q1 Jul	\$0.0	\$0.0	\$0.2	Q1 Jul	\$(0.28)A	\$(0.14)E	\$(0.43)E
Q2 Oct	\$0.0	\$0.0	\$0.9	Q2 Oct	\$(0.22)A	\$(0.15)E	\$(0.43)E
Q3 Jan	\$0.0	\$0.1	\$1.8	Q3 Jan	\$(0.16)E	\$(0.37)E	\$(0.50)E
Q4 Apr	\$0.0	\$0.1	\$3.1	Q4 Apr	\$(0.15)E	\$(0.42)E	\$(0.50)E
Total	\$0.0	\$0.19	\$6.00	Total	\$(0.78)E	\$(1.07)E	\$(1.85)E

*Quarterly estimates may not add to annual estimates due to variations in contributing estimates and rounding.

Source: Company reports, Yahoo Finance, Ascendant Capital Markets estimates

FINANCIAL MODEL

Heart Test Laboratories, Inc.

Income Statement (\$ mils except EPS) Fiscal Year End: April 30	2021 FY-A	2022 FY-A	Jul-22 Q1A	Oct-22 Q2A	Jan-23 Q3E	Apr-23 Q4E	2023 FY-E	Jul-23 Q1E	Oct-23 Q2E	Jan-24 Q3E	Apr-24 Q4E	2024 FY-E	Jul-24 Q1E	Oct-24 Q2E	Jan-25 Q3E	Apr-25 Q4E	2025 FY-E
Total revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.6	1.0	1.6	2.2	5.4
Total cost of goods sold	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.5	0.7	1.0	2.4
Gross profit (loss)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.5	0.9	1.2	3.0
Operating expenses																	
Research and development	1.7	3.0	0.4	0.8	0.8	0.9	3.0	1.0	1.0	1.1	1.1	4.2	1.1	1.3	1.2	1.4	5.0
Selling, general and administrative	0.9	1.7	1.0	0.9	0.9	1.0	3.8	1.1	1.2	1.3	1.4	5.0	1.6	1.8	2.0	2.2	7.6
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total operating expenses	2.6	4.7	1.4	1.8	1.8	1.8	6.8	2.1	2.2	2.4	2.5	9.2	2.7	3.1	3.2	3.6	12.6
Loss from operations	(2.6)	(4.7)	(1.4)	(1.8)	(1.8)	(1.8)	(6.8)	(2.1)	(2.2)	(2.4)	(2.3)	(9.0)	(2.4)	(2.6)	(2.3)	(2.4)	(9.6)
Other income (expense)																	
Gain on Extinguishments of Debt	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest income (expense)	(0.1)	(0.4)	(0.1)	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other income (expense)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income before taxes	(2.5)	(4.8)	(1.6)	(1.8)	(1.8)	(1.8)	(6.8)	(2.1)	(2.2)	(2.4)	(2.3)	(9.0)	(2.4)	(2.6)	(2.3)	(2.4)	(9.6)
Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net loss	(2.5)	(4.8)	(1.6)	(1.8)	(1.8)	(1.8)	(6.8)	(2.1)	(2.2)	(2.4)	(2.3)	(9.0)	(2.4)	(2.6)	(2.3)	(2.4)	(9.6)
Nonrecurring/noncash adjustments																	
Net income (pro forma)	(2.5)	(4.8)	(1.6)	(1.8)	(1.8)	(1.8)	(6.8)	(2.1)	(2.2)	(2.4)	(2.3)	(9.0)	(2.4)	(2.6)	(2.3)	(2.4)	(9.6)
EBITDA	(2.5)	(4.7)	(1.4)	(1.8)	(1.8)	(1.8)	(6.8)	(2.1)	(2.2)	(2.3)	(2.3)	(9.0)	(2.4)	(2.6)	(2.3)	(2.4)	(9.6)
Weighted average common shares outs Shares, Diluted	3.3 3.3	3.3 3.3	5.6 5.6	8.2 8.2	8.2 8.2	8.2 8.2	7.2 7.2	8.2 8.2	8.2 8.2	8.2 8.2	8.2 8.2	8.2 8.2	8.2 8.2	8.2 8.2	8.2 8.2	8.2 8.2	8.2 8.2
EPS Basic	\$ (0.74)	\$ (1.45)	\$ (0.28)	\$ (0.22)	\$ (0.22)	\$ (0.22)	\$ (0.94)	\$ (0.26)	\$ (0.27)	\$ (0.29)	\$ (0.29)	\$ (1.10)	\$ (0.29)	\$ (0.31)	\$ (0.28)	\$ (0.29)	\$ (1.17)
EPS Diluted	\$ (0.74)	\$ (1.45)	\$ (0.28)	\$ (0.22)	\$ (0.22)	\$ (0.22)	\$ (0.94)	\$ (0.26)	\$ (0.27)	\$ (0.29)	\$ (0.29)	\$ (1.10)	\$ (0.29)	\$ (0.31)	\$ (0.28)	\$ (0.29)	\$ (1.17)
Margins																	
Gross margin	58%	45%	36%	NM	50%	50%	36%	50%	50%	50%	52%	52%	54%	54%	56%	56%	55%
Research and development	6673%	20883%	13569%	NM	NM	NM	93192%	NM	NM	1100%	367%	1050%	183%	130%	76%	64%	93%
Selling, general and administrative	3416%	11928%	31158%	NM	NM	NM	118716%	NM	NM	1300%	467%	1250%	267%	180%	125%	100%	141%
Operating margin	-10044%	-32766%	-44691%	NM	NM	NM	-211872%	NM	NM	-2350%	-781%	-2249%	-396%	-256%	-145%	-108%	-178%
Tax rate, GAAP	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Net margin	-9577%	-33593%	-49166%	NM	NM	NM	-211384%	NM	NM	-2350%	-781%	-2249%	-396%	-256%	-145%	-108%	-178%
Y/Y % change																	
Revenue	-60%	-44%	-57%	#DIV/0!	-100%	-100%	-78%	-100%	#DIV/0!	#DIV/0!	#DIV/0!	12400%	15%	15%	15%	15%	1250%
COGS	-77%	-26%	-65%	#DIV/0!	-100%	-100%	-74%	-100%	#DIV/0!	#DIV/0!	#DIV/0!	9428%	#DIV/0!	#DIV/0!	1308%	572%	1141%
Gross Profit	-16%	-57%	-33%	#DIV/0!	-100%	-100%	-82%	-100%	#DIV/0!	#DIV/0!	#DIV/0!	17598%	#DIV/0!	#DIV/0!	1692%	690%	1352%
Research and development	-16%	76%	8%	56%	21%	-37%	-1%	130%	8%	8%	8%	41%	10%	10%	10%	10%	19%
Selling, general and administrative	-51%	96%	262%	125%	130%	52%	122%	10%	10%	10%	10%	32%	8%	8%	8%	8%	52%
Total operating expenses	-33%	82%	112%	85%	61%	-9%	44%	47%	24%	35%	39%	36%	29%	41%	34%	44%	37%
Operating Income	-33%	83%	112%	85%	61%	-9%	44%	47%	24%	32%	30%	33%	13%	16%	-2%	1%	7%
Net income	-35%	97%	214%	75%	43%	-12%	40%	33%	22%	32%	30%	33%	13%	16%	-2%	1%	7%
EPS	-36%	97%	85%	-29%	-42%	-65%	-36%	-9%	22%	32%	30%	17%	13%	16%	-2%	1%	7%

Source: Company reports, Ascendant Capital Markets estimates

Heart Test Laboratories, Inc.

Balance Sheet (\$ mils)	Apr-21	Apr-22	Jul-22	Oct-22	Jan-23	Apr-23	Jul-23	Oct-23	Jan-24	Apr-24	Jul-24	Oct-24	Jan-25	Apr-25
Fiscal Year End: April 30	Q4A	Q4A	Q1A	Q2A	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E
Current assets														
Cash	0.7	0.9	4.3	3.1	0.5	(1.3)	(3.4)	(5.6)	(7.9)	(10.2)	(12.5)	(15.0)	(17.3)	(19.5)
Accounts receivable, net	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inventories, net	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Prepaid expenses and other assets	0.1	0.0	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Deferred offering Costs	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Current Assets	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total current assets	1.6	1.9	5.4	4.1	1.6	(0.2)	(2.3)	(4.5)	(6.8)	(9.2)	(11.5)	(14.0)	(16.3)	(18.5)
Operating lease right-of-use asset, net	0.2	0.1	0.1	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Property and equipment, net	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total assets	1.9	2.1	5.6	4.8	2.2	0.4	(1.7)	(3.9)	(6.2)	(8.5)	(10.9)	(13.4)	(15.6)	(17.9)
Liabilities and Stockholders' Equity														
Current liabilities														
Accounts payable	0.3	0.7	0.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.3
Accrued expenses	0.3	1.1	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Ppp Loan Payable	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Portion of Notes Payable	0.1	1.6	0.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Lease liability - current	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Current Liabilities	0.0	0.0	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Total current liabilities	1.1	3.5	1.5	3.1	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.6	2.7
Accrued Expenses	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lease liability - long-term	0.1	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Notes Payable	2.5	4.4	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Preferred Stock Convertible	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total liabilities	3.8	8.1	2.7	3.7	2.9	2.9	2.9	2.9	2.9	2.9	3.0	3.0	3.1	3.2
Stockholders' Equity														
Common stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional paid-in capital	47.7	48.3	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9
Accumulated deficit	(49.6)	(54.4)	(56.0)	(57.8)	(59.6)	(61.4)	(63.5)	(65.7)	(68.0)	(70.4)	(72.7)	(75.3)	(77.6)	(80.0)
Total stockholders' equity	(1.9)	(6.1)	2.9	1.1	(0.7)	(2.5)	(4.6)	(6.8)	(9.1)	(11.5)	(13.9)	(16.4)	(18.7)	(21.1)
Total liabilities and stockholders' equity	1.9	2.1	5.6	4.8	2.2	0.4	(1.7)	(3.9)	(6.2)	(8.5)	(10.9)	(13.4)	(15.6)	(17.9)

Balance Sheet Drivers

	Apr-21	Apr-22	Jul-22	Oct-22	Jan-23	Apr-23	Jul-23	Oct-23	Jan-24	Apr-24	Jul-24	Oct-24	Jan-25	Apr-25
	Q4A	Q4A	Q1A	Q2A	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E
Book & Cash Value (per share)														
Book Value per Share (diluted)	(0.58)	(1.82)	0.51	0.13	(0.08)	(0.30)	(0.56)	(0.83)	(1.11)	(1.40)	(1.69)	(2.00)	(2.28)	(2.57)
Cash per Share (diluted)	0.22	0.35	0.76	0.37	0.06	(0.16)	(0.41)	(0.68)	(0.96)	(1.24)	(1.53)	(1.83)	(2.10)	(2.38)
Net cash per Share (diluted)	(0.54)	(0.99)	0.58	0.37	0.06	(0.16)	(0.41)	(0.68)	(0.96)	(1.24)	(1.53)	(1.83)	(2.10)	(2.38)

Source: Company reports, Ascendant Capital Markets estimates

Heart Test Laboratories, Inc.

Cash Flow Statement (\$ mils)	2021	2022	Jul-22	Oct-22	Jan-23	Apr-23	2023	Jul-23	Oct-23	Jan-24	Apr-24	2024	Jul-24	Oct-24	Jan-25	Apr-25	2025
Fiscal Year End: April 30	FY-A	FY-A	Q1A	Q2A	Q3E	Q4E	FY-E	Q1E	Q2E	Q3E	Q4E	FY-E	Q1E	Q2E	Q3E	Q4E	FY-E
Cash flow from operating activities																	
Net loss	(2.5)	(4.8)	(1.6)	(1.8)	(1.8)	(1.8)	(7.0)	(2.1)	(2.2)	(2.4)	(2.3)	(9.0)	(2.4)	(2.6)	(2.3)	(2.4)	(9.6)
Adjustments:																	
Depreciation and Amortization	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortization of Debt Discount and Defere	0.0	0.2	0.1	0.0			0.1										
Gain/loss on Disposal of Property and Equ	0.0	0.0	0.0	0.0			0.0										
Stock based Compensation	0.0	0.1	0.1	0.0			0.1										
Gain on Extinguishment of Debt	(0.3)	(0.3)	0.0	0.0			0.0										
Other Assets	0.0	0.0	0.0	0.0			0.0										
Gain on Settlement of Payables	0.0	0.0	(0.1)	0.0			(0.1)										
Warrants Issued for Note Extension	0.0	0.0	0.0	0.0			0.0										
Stock Issued for Note Facility Fee	0.0	0.0	0.0	0.0			0.0										
WC changes																	
Accounts Receivable	0.0	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inventory	0.1	0.1	(0.0)	0.0	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts Payable	(0.0)	0.4	(0.2)	0.3	(0.8)	0.0	(0.6)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.3
Accrued Liabilities	0.1	0.9	(0.5)	0.2	0.0	0.0	(0.2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deferred offering Costs	0.0	(0.2)	0.2	0.0			0.2										
Prepays and Other Current Assets	0.0	0.1	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Current Liabilities	0.0	0.0	0.0	0.0			0.0										
Net cash used in operating activities	(2.5)	(3.6)	(1.8)	(1.1)	(2.6)	(1.8)	(7.3)	(2.1)	(2.2)	(2.3)	(2.3)	(8.9)	(2.3)	(2.5)	(2.2)	(2.3)	(9.3)
Investing Activities																	
Purchase of Property and Equipment	(0.0)	(0.0)	(0.0)	0.0	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Disposition of Property and Equipment	0.0	0.0	0.0	0.0			0.0										
Net cash used in investing activities	(0.0)	(0.0)	(0.0)	0.0	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financing Activities																	
Proceeds from Convertible Promissory No	1.5	4.2	0.0	0.0			0.0										
Proceeds from Issuance of Common Stock	0.0	0.0	5.2	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Repayment of Shareholder's Note	0.0	(0.5)	0.0	0.0			0.0										
Proceeds from Shareholders Notes	0.7	0.5	0.0	0.0			0.0										
Proceeds from Ppp Loan	0.3	0.0	0.0	0.0			0.0										
Repayment of Financing Leases	0.0	0.0	(0.0)	(0.1)			(0.2)										
Proceeds from Issuance of Series C Prefe	0.2	0.0	0.0	0.0			0.0										
Deferred Financing Costs	0.0	(0.4)	0.0	0.0			0.0										
Net cash provided by financing activities	2.7	3.8	5.2	(0.1)	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net cash increase (decrease)	0.2	0.2	3.4	(1.2)	(2.6)	(1.8)	(2.2)	(2.1)	(2.2)	(2.3)	(2.3)	(8.9)	(2.3)	(2.5)	(2.2)	(2.3)	(9.3)
Cash balance at beginning of period	0.5	0.7	0.9	4.3	3.1	0.5	0.9	(1.3)	(3.4)	(5.6)	(7.9)	(1.3)	(10.2)	(12.5)	(15.0)	(17.3)	(10.2)
Cash balance at end of period	0.7	0.9	4.3	3.1	0.5	(1.3)	(1.3)	(3.4)	(5.6)	(7.9)	(10.2)	(10.2)	(12.5)	(15.0)	(17.3)	(19.5)	(19.5)

Source: Company reports, Ascendant Capital Markets estimates

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Heart Test Laboratories, Inc.

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Total return is defined as price appreciation plus dividend yield.

Ascendant Capital Markets, LLC Rating System

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Total return is defined as price appreciation plus dividend yield.

Ascendant Capital Markets, LLC Distribution of Investment Ratings (as of January 15, 2023)

Disclosures:

Investment Banking Services Past 12 Months

	Count	Percent	Count	
Buy	44	98%	18	Buy
Hold	0	0%	0	Hold
Sell	1	2%	0	Sell
Total	45	100%	18	Total

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