

Using at-home blood testing technology to enable personalized medicine



innamed.com Philadelphia PA

Technology B2B Analytics Y Combinator Healthcare

LEAD INVESTOR



Daniel Robert Bensimhon Medical Director, Cone Health

Being able to monitor labs at home will allow physicians to close the loop with virtual care visits and provide safer and more guideline-driven therapy for our patients. The InnaMed HomeLab technology is the best I have seen. It is easy to use for the patient and will instantly raise the standard of care across numerous disease states. I'm investing because it is the piece we are missing to make our telemedicine visits even more meaningful.

[OVERVIEW](#) [UPDATES](#) [WHAT PEOPLE SAY](#) [ASK QUESTION](#)

Highlights

- 1 Raised \$2M+, backed by Y Combinator and leading Silicon Valley investors
- 2 \$1.4M+ in revenue in 2020 (up 600% YoY) from ongoing, multi-year pharmaceutical R&D collaborations
- 3 Received grants from NASA and US Dept. of Health & Human Services for innovative HomeLab® technology
- 4 9 patent applications and 5 peer-reviewed publications on technology
- 5 Initially targeted towards specific clinical applications totaling \$5B+ in market potential
- 6 Led by innovators from UPenn and experienced execs from UCSF, Duke, \$ASND, \$ABT, and \$CDNA

Our Team



Eshwar Inapuri CEO

Y Combinator-backed founder and bioengineer. Previously conducted R&D at UPenn for 4+ years combining microfluidics, optics and cloud computing to develop proteomics. Work published in PNAS and exclusively licensed to another venture-backed startup.

There's a clear disconnect between the pace of scientific and technical advancement in the biotech industry (fast) and the pace of improvement in the day-to-day lives of patients and healthcare workers (slow). InnaMed was founded to help bridge that gap.



Anup Singh CSO

Y Combinator-backed founder and biophysicist. Previously conducted R&D for 5+ years at UCLA and UPenn on early detection of cancers and traumatic brain injury. Invited conference speaker topics ranging from precision medicine to space health.



Tom Larson Commercial Development Lead

Executive with 25+ years of experience in the biopharma and diagnostics industries. Most recently served as Chief Commercial Officer of Ascendis Pharma. Led launches of some of the most successful drugs including Humira and Pradaxa.



Kenneth Fang Clinical Development Lead

Executive with 20+ years of experience in diagnostics. Most recently Chief Medical Officer (CMO) of Diadexus. Prior to that, served as CMO at Integrated Diagnostics and Senior Director at CareDx. Prior to industry, was an Assistant Professor at UCSF.



Chris Easley Scientific Advisor

Professor at Auburn University with 20+ years of experience in analytical chemistry. Developed and patented foundational technologies exclusively licensed by InnaMed. Featured in prestigious journals (Nature, PNAS, JACS) and backed by NIH and NSF.

Pitch

Creating the gateway to personalized healthcare.

Interfacing with the healthcare system is notoriously challenging. Scheduling appointments, determining insurance coverage, traveling, waiting, testing, scanning, picking up prescriptions, etc....the list of manual tasks goes on and on.

At InnaMed, we have reimagined a major part of this journey: we make monitoring and analyzing blood test data fast and seamless, and we're also creating a one-stop platform through which you can access and experience digital health services.

WHAT WE DO

We capture, analyze, distribute blood test data from the home.



At-home Blood Testing and Patient Monitoring Technology



**Apps & APIs
for integration**
Pharmaceuticals/CROs
Chronic Care Providers
Digital Health Providers



Measure, analyze, enhance: from the comfort & privacy of home.

Monitoring and analyzing blood test data is crucial to several healthcare decisions.

Clinical trials rely on blood monitoring to determine safety, efficacy, and optimal dosing of new therapies. Each patient that is non-adherent to dosing and monitoring adds \$25,000+ in clinical trial costs.

In medical practice, patients with complex conditions such as heart failure or organ transplant are usually on several drugs at once. Many therapeutics have a narrow therapeutic range and side effects (kidney or liver toxicity). If not taken at the right doses or frequencies, they can have adverse health consequences.

Blood monitoring is a key component of getting the right patients on the right therapies, at the right doses.

THE PROBLEM

Optimally **dosing** and **monitoring** therapeutics is tedious.

Chronic therapies are often sub-optimally managed.

This means poor patient outcomes,
lost pharmaceutical revenues, and
higher costs for insurance providers

The impact of therapeutic optimization is undeniable in clinical outcomes. For example, transplant patients who maintain immunosuppressant levels within range are nearly 70% less likely to experience rejection. Similarly, heart failure patients who take guideline medication have over 30% reduced mortality. The precise dosing of medications is important and often requires careful blood monitoring.

While discovering new therapies is important, utilizing those therapies properly is just as important to safely achieving their maximum potential. That is where InnaMed can make a difference. We let you measure + analyze + enhance – all from the comfort and privacy of home.



A connected hub for your health needs.

InnaMed's flagship product, the HomeLab® system, enables push button blood testing in the home. There are three components to the system: 1) a disposable, one-time-use blood collector for virtually painless self-sampling, 2) a disposable, one-time-use cartridge for sample analysis and 3) a counter-top IoT device which reads results, conducts symptom surveys, and handles communication with cloud services.



1

Insert the cartridge

Inserting the cartridge starts a 3-step calibration process that ensures clinical-grade results.



2

Collect the blood sample

Pressing the button on the microneedle collector starts virtually painless blood collection



3

Transfer sample and take survey

Removing the tube and inserting into the cartridge begins blood sample analysis.

A single HomeLab cartridge can perform up to 24 unique tests. Our first

cartridge, HomeLab RMX, tests for a panel of metabolic markers commonly used in clinical decision making. This cartridge is useful in monitoring patients in clinical trials or patients with chronic illnesses who are undergoing therapeutic changes.

InnaMed has several additional cartridges in its development pipeline, targeting conditions such as organ transplant, rare diseases, and autoimmune diseases. Several pipeline cartridges have pharma collaborators funding development and pre-ordering units.

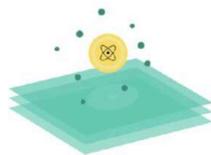
Enabled by biosensor technology.

HomeLab cartridges function using proprietary fluidics and electrochemistry. Our technology can measure proteins and peptides, small molecule drugs, hormones, antibodies, and standard clinical chemistries. Tests can be performed in as quickly as 10 minutes, with detection of femtomolar (10^{-15}) concentrations.

InnaMed has a growing portfolio of 9 patents and 5 publications on its technology and has performed studies with patient samples demonstrating strong correlation to clinical labs. This technology can be expanded from blood to urine and even saliva samples in the future.



On cartridge blood sample processing



Biosensors measure electron transfer rates



Electrical signals to patient e-report

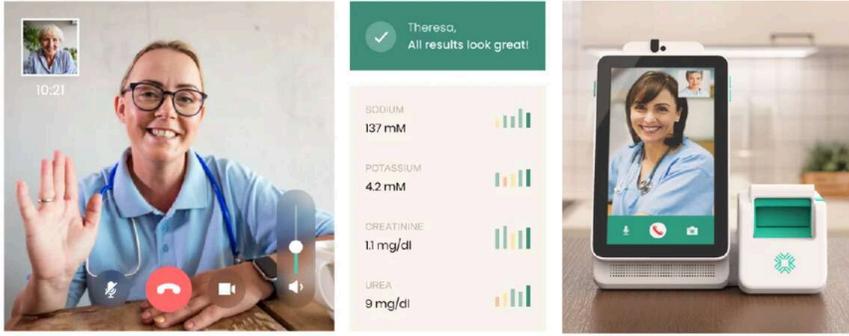
Precision medicine, powered by the cloud.

In addition to blood testing, InnaMed's HomeLab has a suite of connectivity features. Bluetooth, Wi-Fi, cellular and NFC ensure reliable and easy connectivity. Blood test data along with survey and vitals data is packaged into a comprehensive e-report. These e-reports can be synced to EMR or LIMS systems, integrating into existing clinical and research workflows, or viewed on InnaMed's custom HomeLab web application.



Data consolidation enables analysis on patient, provider, organization, and disease scales with sufficient resolution to understand time variance. The deidentified data lake generated by HomeLab devices can become a monetizable

asset its own. Downstream of data analysis is integration with the healthcare experience. InnaMed plans to integrate available digital health services onto the HomeLab platform, creating a truly one-stop experience.

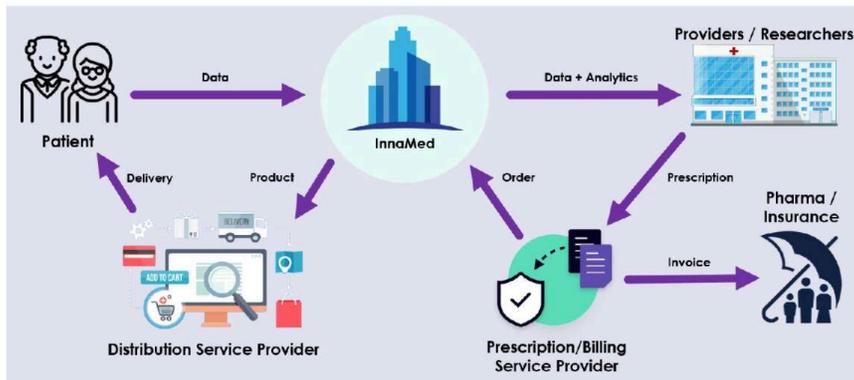


Unique positioning to revolutionize a legacy industry.

The personalized medicine platform being built by InnaMed holds tremendous value for not just patients and providers but also pharmaceutical companies and contract research organizations (CROs).

InnaMed's initial business model involves selling the HomeLab and HomeLab RMX cartridges to pharmaceutical companies and CROs on a subscription basis to enhance and digitize clinical trials. The virtual clinical trial market is expected to reach \$14B in 2027 and is growing at an annual rate of 12.6%. InnaMed is also collaborating with pharmaceutical companies to develop tailor-made cartridges. In many cases, such research collaborations do not require FDA clearance, enabling pre-regulatory revenue.

Simultaneously, InnaMed is pursuing regulatory clearance for the HomeLab and HomeLab RMX cartridge for patient use outside of the clinical trial setting, aiming to aid providers in implementing and optimizing medical guideline recommended therapy in the real world. The company has had multiple presubmission meetings and is working closely with FDA for both clinical and research use cases.



InnaMed is initially targeted towards specific clinical applications totaling \$5B+ in market potential. The at-home diagnostics and personalized medicine industry is poised to accelerate, providing InnaMed with significant growth opportunity. The company has several multi-year pharma R&D collaborations and generated over \$1.4M in revenue in 2020. With 7 full-time employees, expert executive guidance and a large team of contractors and consultants supporting manufacturing, regulatory and commercial efforts, InnaMed is ready to become a

leading telemedicine technology company.

InnaMed Team



Eshwar Inapuri
Founder, CEO



Anup Singh
Founder, CSO



Tom Larson
Commercial Lead



Ken Fang
Clinical Lead



PhD Chemist



Industrial
Chemist



PhD Chemist



Industrial
Chemist



Mech. Eng.

Become an owner of InnaMed – positive social impact with strong potential for financial upside

Invest now to make healthcare easier for the millions of patients who are unhappy with the status quo. With your investment, we will finish pilot manufacturing of HomeLab, conduct FDA 510(k) clinical studies and achieve regulatory clearance within a year's time.

RAISING FUNDS TO:

Build a clinical data acquisition platform for the future of healthcare delivery.

WHAT'S NEXT

Launch the platform

Production Units

Expand the team

Scientists

Engineers

Sales/marketing

Clinical/regulatory

Execute on the pipeline

Pharma sales growth

First FDA clearance

