



The Problem

Almost 2 billion people living in the emerging and developing countries suffer from lack of access to a timely diagnostic.

Current diagnostic technologies can detect diseases with a high level of accuracy, but they require specialized equipment and technicians which are scarce in low resource settings.

For example, each year there are 10 million new cases of Tuberculosis, and globally, one third of all cases are not diagnosed. The global strategy for Tuberculosis control after 2015 aims at a 95% reduction in deaths and a 90% reduction in incidence by 2035. To achieve these goals the implementation of new health-system strategies and diagnostic tools are critically important.

New point-of-care diagnostic tests are required, which should be simpler, low-cost tests that can be used by first-contact health-care providers to identify those who need treatment or further testing (confirmation tests). The potential demand for this kind of tests is estimated in \$23 billion by 2020 with a CAGR of 10.7%.

Our solution

Unima developed a fast and low-cost diagnostic and disease surveillance technology that allows anyone, even those with no medical training, to diagnose a disease directly where the patient is, without using lab equipment, with results in 15 minutes and at \$1 per test.

The test requires only four simple steps:



This is a technology platform that allows the development of qualitative and quantitative tests for different diseases targeting biomarkers like antigens, antibodies, toxins, proteins, etc.

Using this platform, the company builds tests for infectious and chronic diseases that will help patients to receive treatment sooner and will narrow the population that needs confirmatory testing, helping to reduce healthcare costs and the workload of health-care staff, also increasing the number of patients diagnosed on time. The real time data resulting from these diagnostics is used by governments, health organizations and pharmaceutical companies to create better products and strategies to stop disease outbreaks and prevent pandemics.



*Fast and low cost diagnostics for
low resource settings*

 @Unima_

 [linkedin.com/company/unimainc/](https://www.linkedin.com/company/unimainc/)

Company description

Unima developed a fast and low-cost diagnostic and disease surveillance technology that allows anyone, even those with no technical training, to diagnose diseases at the point of care, without lab equipment and at \$1 per test.

With this technology the company is working to solve the problem of lack of access to a timely diagnostic for 2 billion people living in low resource settings.

Technology Advantages

- 15 minutes, easy to use and \$1 test
- Can be used by personnel with minimum training
- Technology usable in remote areas
- Platform allows a quick development of new tests at a low cost

Founder Team



Jose Luis Nuno
Chief Executive Officer



Laura Mendoza
Chief Product Officer



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Chief Scientific Officer



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Technology description

The technology is based in a chimeric recombinant antibody from a shark that can be modified with genetic engineering to catch specific biomarkers of diseases in blood, urine or saliva samples. These antibodies have characteristic thermostable capabilities which increases significantly the shelf life of the test and allows its use in harsh environments and the use of very low-cost inkjet manufacturing processes to decrease product costs. The selected proteins are printed in a paper microfluidic device, and when they get in contact with the sample from an infected patient they generate a visual reaction. The result of the test is evaluated in the smartphone app by image analysis processes and neural network algorithms to generate a very accurate result.

Business model

Unima works with large clients and users in the four target markets developing new qualitative and quantitative rapid tests for infectious and non communicable diseases using the technology platform. The company designs each test to cover the specific needs of these partners and work along with them in the validation and clinical testing stages to take the product to the market. Revenue is generated by sales from commercialization of the tests to clients, and access to their data is free for them. An additional business model will be built over access to statistical data and analytics to non users for disease surveillance.

Clinical validation

The Tuberculosis and HIV test cleared a clinical trials in Mexico with a cohort of 328 patients. Results show a pooled Sensitivity of 96.1% and a Specificity of 98% for the Tuberculosis test and 98.7% and 100% for the HIV test. An external validation protocol was performed by the National Health Institute Salvador Zubiran with similar results. Large scale validations will be run in Zambia and India in collaboration with PATH, in South Africa in collaboration with the Witwatersand University, in Cameroon in collaboration with the StopTB Partnership and in Indonesia with the University of Jakarta. Clinical trials for new tests (Dengue, Zika, Diabetes, Anemia) will start in Q1 2020.

Founder Team

Unima was founded by a second time founder team, having previously developed and launched a pharmaceutical product for animal health that is sold in 14 countries in collaboration with a global pharma company. Therefore, the team has proven experience in R&D, Marketing, Sales, Compliance and Operations in the pharma industry. The founder team was part of the YCombinator (San Francisco), Google Launchpad (San Francisco) and MassChallenge (Boston) acceleration programs and they are Endeavor entrepreneurs.

Current status

The first test developed over the platform for Tuberculosis is starting regulatory approval process in Mexico and in the European Union with an expected release in Q3 2019 and new regulatory submissions in African and Latin American countries will start in Q1 2020. The goal is to launch this test in target countries in Sub Saharan Africa and Latin America starting in Q2 2020. The company is developing new tests over the technology platform in collaboration with key early users and strategic partners targeting diseases like Dengue, Zika, Diabetes, animal health diseases, etc.

Funding

Unima is in process of raising a \$7 million USD Series A round to fund the global launch the Tuberculosis test, including further clinical validation and regulatory approvals in Latin America, Sub Saharan Africa, India, China and South East Asia. Also to launch the current pipeline of new tests in those same markets and grow the number of key users of the technology in the Private Health market (global pharma and insurance companies) and in the Global Health market (health NGOs). The goal is to deploy 50 million tests per year by 2024.

Target markets

- Global Health: Health NGOs and international aid organizations
- Public Health: National Health Systems
- Private Health: Pharma and insurance companies
- Animal Health: livestock producers

Key target regions

China, India, Brazil, Sub Saharan Africa, Latin America, South East Asia

Countries with current early users

Indonesia, India, Zambia, South Africa, Chile, Peru, Ecuador, Colombia, Guatemala, Mexico

Awards and key achievements

Winner Health Vertical at the Singularity Univ Summit 2018

Second place TechCrunch Battlefield LATAM 2018

Winner WeXChange 2018

Finalist eMerge Americas 2019

YCombinator alumni 2016

Google Launchpad Alumni 2017

Endeavor Entrepreneur

Collaboration



AMERICAS TB COALITION



Funding (USD)

- Non dilutive grants: \$650 K
- Seed investment round: \$2.0 M
- Raising a \$7 million Series A round

Investors

