



Bring High-Performance Diagnostics to Patient's Side

INCORPORATED: November, 2019

INDUSTRY: Diagnostics, Point-of-care

MARKETS: COVID-19 as entry point. Infectious Diseases, Cardiology, Neurology and beyond

TRACTION: NDAs with multiple Diagnostic and Research companies; RADx;

RAISING: \$2 Million USD as seed funding

PRODUCT DESCRIPTION

Instanosis Inc. focuses on commercialization of an innovative and broadly-applicable point-of-care platform to detect ultra-low concentrations of disease biomarkers, with the lead application being an ultrasensitive and low-cost COVID antigen test. The technology is based on proprietary technology developed out of the Founder's laboratory at University of Pennsylvania. This platform has many applications in Infectious Diseases, Cardiology, Neurology and other disease areas, where rapid, convenient and ultra-sensitive biomarker detection is crucial for disease detection and treatment.

MARKET

There is broad unmet diagnostic needs for Instanosis's platform. A significant market gap exists for RAPID, LOW COST, HIGHLY SENSITIVE technologies that can be widely deployed, for both research and diagnostic markets. For the lead application, global market size value for COVID19 diagnostic testing in 2020 is \$5.2Billion, with a CAGR of 5.96% from 2020-2027, estimated at \$7.8B in 2027. Other applications also have significant markets, with protein biomarker testing at \$10.4B and point-of-care testing at \$19.2B with 5.7% CAGR.

COMPETITION

	Instanosis	rRT-PCR	Lateral flow antigen tests
Target	Antigen	RNA	Antigen
Assay complexity	+	+++	+
Time to results	~20 min	Hours-days	~15 min
Operator training needed	+	+++	+
Widely deployable	√	×	√
Sensitivity	+++	+++	+*
Specificity	+++	+++	+
Frequent repeated testing	√	×	√
Data transmission and integration at POC	√	×	×
Setting	Community, homes, clinics, field	High complexity labs, BSL2+	Community

TEAM

Founder and President: Professor Ping Wang, University of Pennsylvania, an Internationally-known expert in diagnostics; **Advisory Board:** Professor Ronald G Collman, Director of Penn CFAR; Dr. Cynthia Cai, US Healthcare Lead, Northern Light Venture Capital; President, Tharton Consulting; Dr. Xiaofeng Xia, CEO, ATGC Inc.

INTELLECTUAL PROPERTY

PCT International application filed for microbubbling digital assay (September 2019)

Provisional patent application filed for SARS-CoV-2 application (June 2020)

FUNDING REQUIRED

Raising \$2M USD for R&D, regulatory approval and marketing

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