APPLYING GOLD NANOROD TECHNOLOGY TO DISRUPT GLOBAL RAPID DIAGNOSTICS MARKETS

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CSE:SONA | OTC:SNANF

November 2020

FORWARD-LOOKING STATEMENTS

This presentation contains forward-looking information under applicable securities law. All information that addresses activities or developments that we expect to occur in the future is forward-looking information. Forward-looking statements are based on the estimates and opinions of management on the date the statements are made.

Such forward-looking statements include, but are not limited to, statements regarding: the Company's intention to develop a rapid, antigen-based COVID-19 lateral flow test and the Company's belief in the potential performance of its COVID-19 antigen test; the anticipated benefits of Sona's GNR technology; anticipated growth in the global point-of-care (PoC) diagnostics market; the intended pursuit of European self-certification regulatory approval; intended next steps in development of a saliva-based test; potential near-term drivers of Sona's business; and longer term applications of Sona's technology.

Actual results may differ materially from those set forth in this presentation due to risks and uncertainties affecting the Company and its products. These forward-looking statements involve known and unknown risks and uncertainties and those risks and uncertainties include, but are not limited to the Company's ability to develop a rapid, antigen-based COVID-19 test through the successful and timely completion of evaluation studies; anticipated benefits of Sona's technology may not be realized; required regulatory approvals may not be obtained in a timely manner or at all; market opportunities may not develop as expected, and demand for the Company's tests may be adversely affected by introduction or success of competing products, or availability of COVID-19 vaccines or treatments reducing demand for testing; and, if development of the Company's test is successful, the commercialization of its rapid, antigen-based COVID-19 test, the ability of the Company secure manufacturing and distribution for its rapid, antigen-based COVID-19 test quickly and at scale and other risks detailed from time to time in the Company's ongoing filings and in its most recent annual information form filed with the Canadian regulatory authorities on SEDAR at www.sedar.com.

Readers are cautioned not to place undue reliance on these forward-looking statements and are encouraged to read the Company's continuous disclosure documents which are available on SEDAR. Such statements should not be regarded as a representation that any of the plans, expectations or intentions will be achieved. Sona takes no responsibility to update forward-looking statements in this presentation except as required by law.

SONA AT A GLANCE

Sona Nanotech is a nanotechnology life sciences company that has developed multiple proprietary methods for the manufacture of gold nanorods (GNR's)

Nanotechnology: the use of matter on an atomic, molecular, and supramolecular scale

Gold Nanorods: gold nanoparticles that are elongated and can provide for more sensitive detection in rapid diagnostic tests

Sona's proprietary gold nanorod (GNR) particles do not use toxic CTAB (cetyltrimethylammonium), eliminating the toxicity risks in biologically-based rapid tests and medical applications.

Sona develops and applies its GNR technologies in diagnostic testing platforms that can significantly improve existing tests and enable entirely new proprietary rapid tests, which could have profound impact on the Global Rapid Diagnostic Medical Market.

Sona's gold nanotechnologies also have the potential to be used in a diverse variety of industries aside from the Medical diagnostics industry, including targeted drug delivery.

COMPANY HIGHLIGHTS

- **Patent pending GNR platform technology** without CTAB positions Sona to potentially disrupt the $26B[1] global point-of-care diagnostic market
- **Lead product** is a 15-minute, antigen lateral flow test that screens for COVID-19 that is easy to use with proven in-field Sensitivity of 85% (96% in the lab)
- **Preparing to commercialize**, manufacture and deliver millions of COVID-19 tests upon receipt of health regulatory approval, with strong demand anticipated from Canadian and international customers
- **Commenced development of next two products**: a saliva-based rapid COVID-19 diagnostic device, potentially for home use, and a rapid concussion screening test
- **Long term development path** for use of GNR's for in-vivo applications which could have profound impact on drug delivery, photothermal therapy, and cell imaging

All figures in USD unless otherwise stated.

Note 1) https://www.reportsanddata.com/report-detail/point-of-care-poc-diagnostics-market#utm_source=globenewswire&utm_medium=referral&utm_campaign=ravi18SEP2019&utm_content=DP

SONA'S GNR TECHNOLOGY IN LFA'S

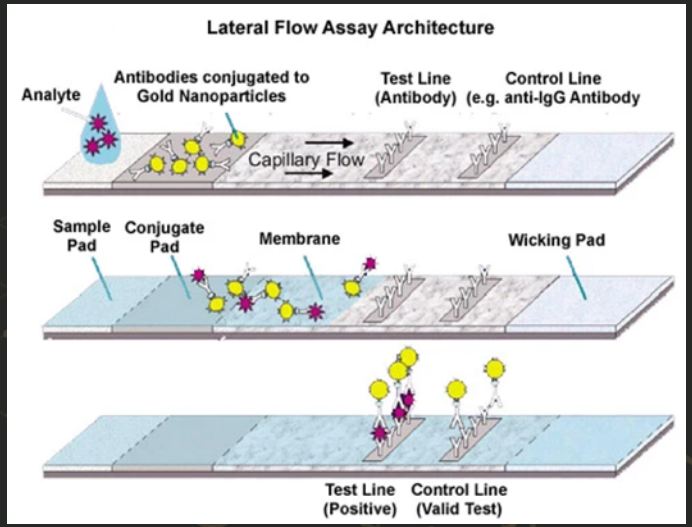
Lateral Flow Assays (LFA's) are simple, fast, and low-cost Point of Care (PoC) diagnostic or screening tools which can provide rapid results (i.e. at-home pregnancy tests).

Sona applies its proprietary GNR technology without CTAB in LFA's to with a view to increasing sensitivity while eliminating the toxicity risks in biologically-based rapid tests and medical applications.

The use of Sona's GNR technology is designed to provide **higher sensitivity and improved accuracy**, which could result in benefits for cost, healthcare resources, policy, and contact tracing.

Patents have been filed for Australia, Canada, China, Europe, India, Japan, Korea, and US based on the International (PCT) Patent Application

~2 billion LFA's are produced each year for a variety of different uses, representing an enormous opportunity to disrupt the Global Rapid Diagnostic market.



Source: https://www.cytodiagnostics.com/pages/lateral-flow-assay

Source: https://www.reportsanddata.com/report-detail/point-of-care-poc-diagnostics-market#utm_source=globenewswire&utm_medium=referral&utm_campaign=ravi18SEP2019&utm_content=DP

LEVERAGING REAL-TIME DATA

Sona partners with Bond Digital Health Solutions to enable real-time data management

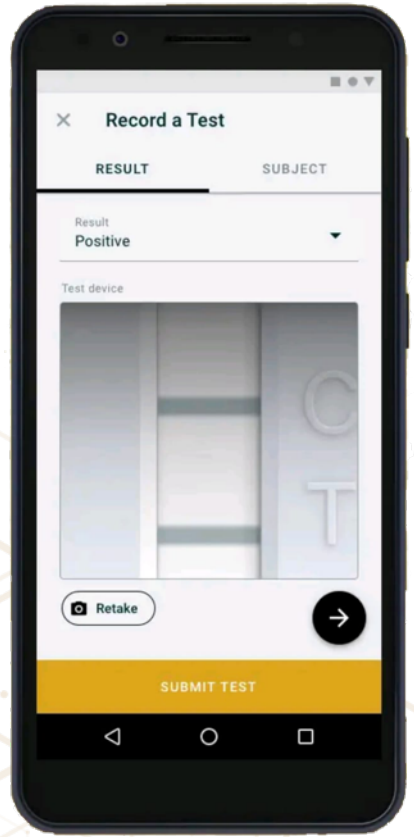
Bond Digital Health is a leading provider of digital solutions for LFAs. Built in partnership with Bond, the **Sona Connect app** offers an end-to-end digital platform that enhances lateral flow tests and improves end user experience.

The app wirelessly captures data collected with Sona LFA's, stores it in the cloud and aggregates results in a dashboard aiding in the analysis of data.

This real-time data and technology will play an integral role in helping healthcare professionals manage and monitor diseases.

> ***"Sona's gold nanorod technology…has the potential to transform this market."***
>
> - Phil Booth, Commercial Director of Bond Digital Health

The app is now available for download on Google Play:



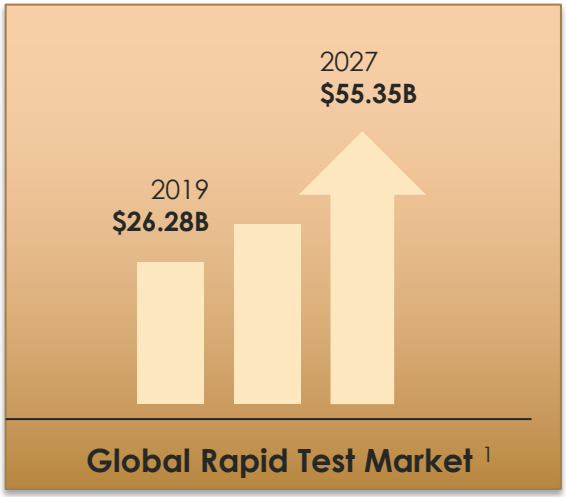
THE GLOBAL RAPID DIAGNOSTIC MARKET

Rapid Diagnostic Tests (RDT's) are medical screening or diagnostic tests that are mobile, quick and easy to perform, and provide rapid results.

The global PoC diagnostics market is **expected to grow to $55.35 Billion USD with 9.6% CAGR** over the next six years.[1]

Growth is attributed to technology advancements enabling a shift from laboratory equipment to rapid PoC testing, while the economic benefits of quick results and real-time data analytics act to limit the spread of infectious diseases.

LFA's are the most widely used and recognized rapid diagnostic test.



Sona applies its GNR technology with the aim to increase the sensitivity of existing LFA's and commercialize proprietary tests for new global market opportunities (i.e. Sona's Rapid COVID-19 Antigen Test and Rapid Concussion Test).

All figures in USD unless otherwise stated.
Note 1) https://www.reportsanddata.com/report-detail/point-of-care-poc-diagnostics-market#utm_source=globenewswire&utm_medium=referral&utm_campaign=ravi18SEP2019&utm_content=DP

FIRST COMMERCIALIZATION: COVID-19 TEST

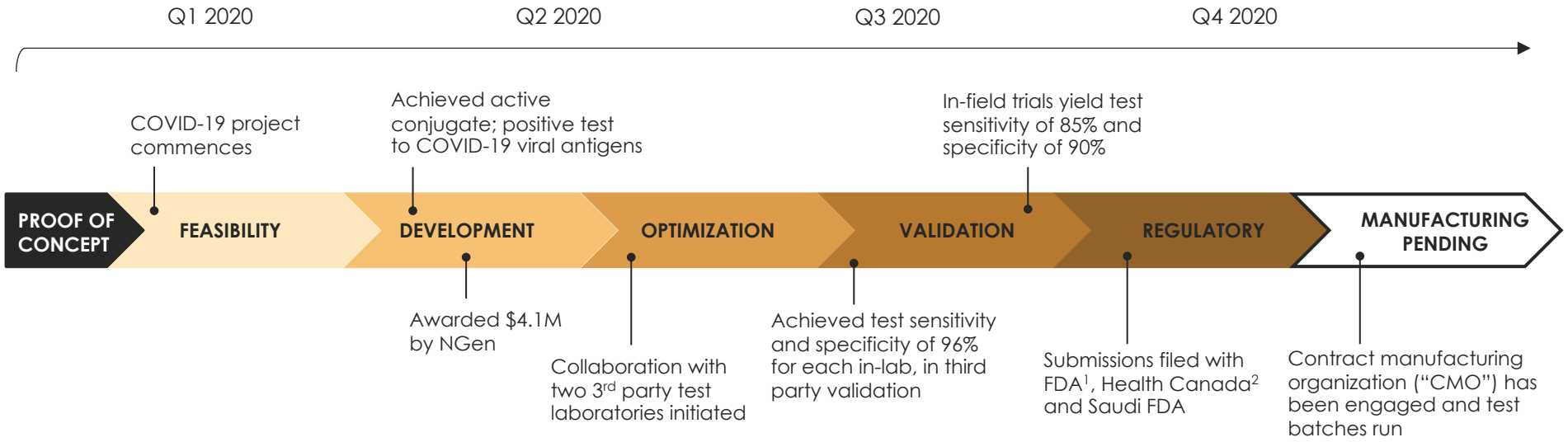
Sona quickly recognized the opportunity to commercialize its GNR technology within an LFA test device to develop a rapid COVID-19 antigen test

- **EARLY DETECTION** Sensitivity of 96% and specificity of 96% in the lab and **94% and 94%** in-field trials for patients within eight days of symptom onset[1] and 85% and 90% for the entire trial cohort.
- **QUICK RESULTS** Results within 15 minutes to enable earlier treatment as well as reducing spread and the need for contact tracing.
- **ON-SITE RESULTS** Can be administered immediately from anywhere by a technician with minimal training.
- **LOWER COST** LFA's cost much less than PCR testing, which is done in laboratories by healthcare professionals.
- **NO SPECIAL EQUIPMENT** Test results are interpreted visually and intuitively, without the need for costly equipment.

> ***"As a leading medical research centre, we have conducted clinical evaluation studies on several point-of-care antigen tests and found Sona Nanotech's rapid antigen test to perform by far the best, and we believe it could be a valuable addition to the existing diagnostic solutions needed to combat this pandemic."***
>
> - Dr. Anwar Hashem, SaudiVax Chief Scientific Officer, Deputy Director of King Fahd Medical Research Center at King Abdulaziz University

[1] Based on a sample size of 18 patients within 0-8 days from symptom onset in the Company's trial conducted by SaudiVax, a US-Saudi Arabian JV supplier of vaccines and pandemic preparedness

HISTORY & STATUS OF SONA'S COVID-19 RAPID ANTIGEN TEST



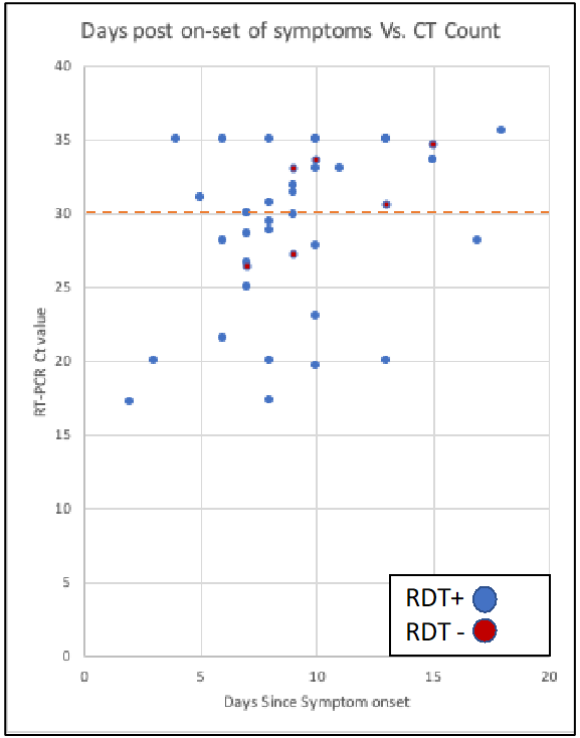
Regulatory approvals to be sought in Europe, Canada and Saudi Arabia in the near-term

Note: 1) FDA notice of de-prioritization received October 28, 2020
2) The Company withdrew its submission to Health Canada on November 25, 2020, and indicated its intention to re-submit at a later date

Strong Clinical Trial and Lab Results

	In-house Prototype Validation	3rd Party Lab Prototype Validation (MRI Global)	3rd Party Clinical Study (SaudiVax)
Goals	• Validation that biological components of the lateral flow test work • Obtain feedback for prototype improvement	• Confirm in-house test performance with third party evaluations using live viral samples	• An in-field study of 99 people was conducted in a high prevalence area to evaluate Sona's test amongst at least 30 positive and 30 negative COVID-19 cases
Evaluation Conducted	• 30 tests run with contrived, gamma irradiated samples	• Limit of detection, interference study and hook effect studies	
Results	• **Sensitivity[1] of 96% and Specificity[1] of 96%**	• **Limit of Detection (LoD) determined to be 2.1 x 10^2 $TCID_{50}$**	

Sona Results	RT-PCR +	RT-PCR -	Total
+	33	6	39
-	6	54	60
Total	39	60	99
Sensitivity (PPA)			**84.6%** (72.6 – 96.6)
Specificity (NPA)			**90.0%** (82.1 -97.6)
Correlation (OPA)			**87.9%**



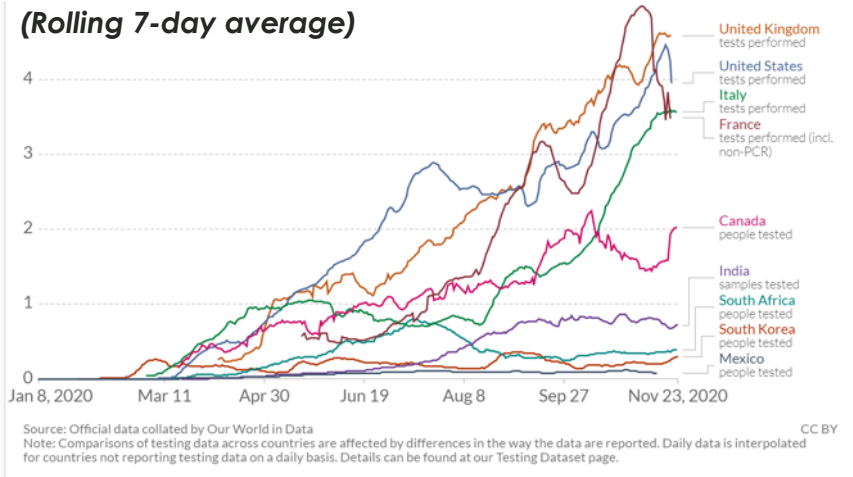
In its Clinical Trial, Sona's Test had 89% Sensitivity for Patients with PCR Test CT Counts <30(2)

Notes: 1) Sensitivity is the true positive rate while specificity is the true negative rate.
2) CT counts below 30 are thought to have 'high' viral loads and be highly infectiousness: https://www.sciencemag.org/news/2020/09/one-number-could-help-reveal-how-infectious-covid-19-patient-should-test-results

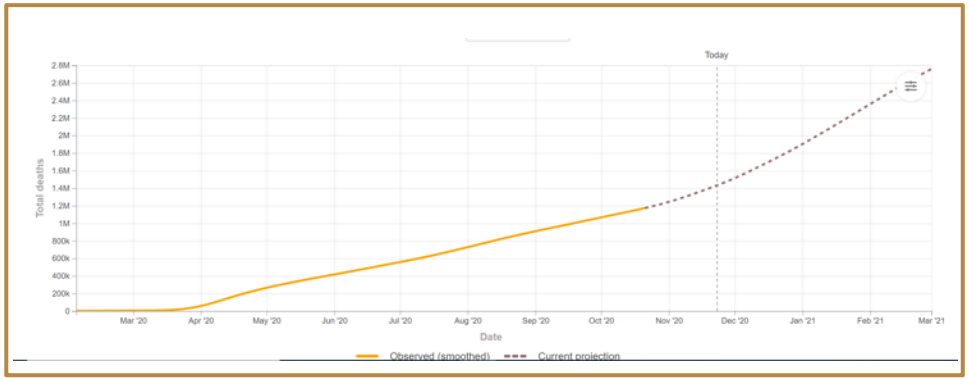
COVID-19 MARKET OPPORTUNITY

With only a handful of rapid tests approved, demand still far outweighs production capacity

DAILY COVID-19 TESTS PER THOUSAND PEOPLE



GLOBAL DEATHS FROM COVID-19 PROJECTED TO DOUBLE IN FOUR MONTHS

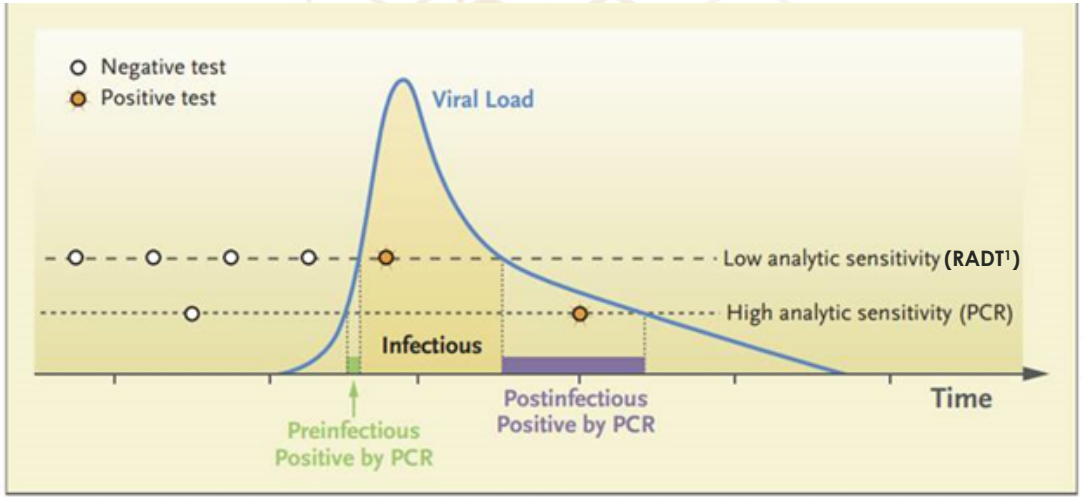


Sona believes that the demand for rapid testing solutions will continue to outstrip supply for the foreseeable future, even with the development of vaccines

Sources: https://ourworldindata.org/coronavirus-testing#how-many-tests-are-performed-each-day
https://covid19.healthdata.org/global?view=total-deaths&tab=trend

THE IMPORTANCE OF FREQUENT RAPID ANTIGEN TEST SCREENING

Turnaround time and frequency can be more important than sensitivity in stopping the spread of COVID-19



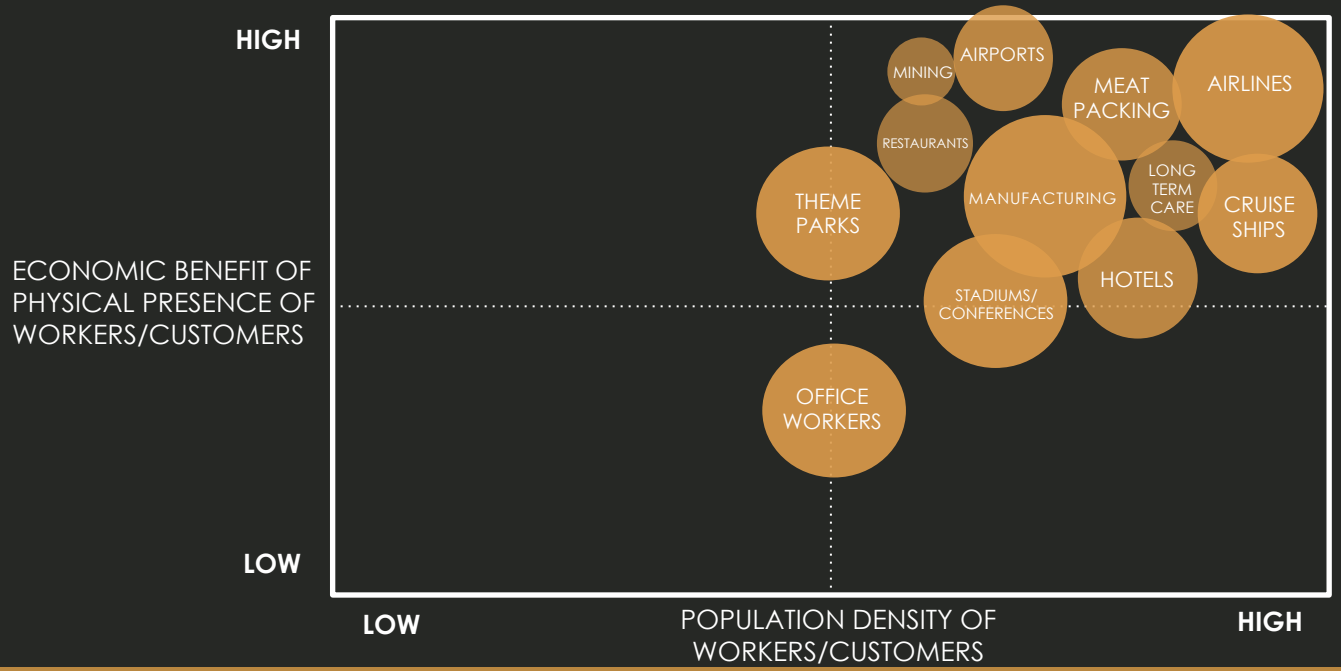
High-Frequency Testing with Low Analytic Sensitivity versus Low-Frequency Testing with High Analytic Sensitivity.

> **"Antigen tests are distinct. They only detect…when the virus is in the process of being infectious. These tests are actually extremely good for detecting contagiousness…"**
>
> **"Increasing the frequency of testing means you're likely to find somebody who is infectious on the day that they first become infectious."**
>
> - Dr. Michael Mina, Assistant Professor of Epidemiology, Harvard T. H. Chan School of Public Health and member of the Center for Communicable Disease Dynamics (CCDD)[2]

Notes 1) RADT: rapid antigen detection test
2) https://www.hsph.harvard.edu/news/features/coronavirus-covid-19-press-conference-with-michael-mina-11-13-20/

PRIVATE SECTOR USE CASES

FOCUS TO BE ON INDUSTRIES THAT REQUIRE PHYSICAL PRESENCE TO CREATE VALUE



ADDITIONAL CHANNELS TO MARKET:

- Occupational health consultants
- Medical device distributors
- Pharmacies

A SALIVA-BASED TEST: VERSION 2.0 OF SONA'S RAPID COVID-19 ANTIGEN TEST

Sona has developed a prototype for a second generation of its rapid COVID-19 antigen test that uses saliva instead of nasal pharyngeal samples

Benefits:

- Less invasive sample collection means faster sample collection and greater comfort
- Leverages existing Sona lateral flow cassette with specific buffer and collection device
- Lower risk of test administrators contracting COVID-19 from positive subjects
- Self-sampling and testing process reduces burden on healthcare professional needs
- Less risk of sampling process conducted incorrectly

Next Steps:

- In-house analytical evaluations with gamma-irradiated virus samples
- Third party lab evaluations with live virus samples
- Clinical testing in a proxy environment for the intended use scenarios
- Regulatory submissions

Sona's Saliva-based Test Has Potential for Home Use

POTENTIAL NEAR-TERM DRIVERS

Sona's rapid COVID-19 antigen test is in the regulatory review phase for approvals to manufacture and distribute

- SONA's in-field and third-party lab testing results, and ongoing data collection, to support ongoing regulatory submissions and future applications.
- Strong demand from large employers that cannot secure supply of rapid antigen tests currently.
- Manufacturing updates to come as regulatory approvals are secured.
- Second generation test using less invasive saliva samples nearing completion for testing validation.
- European regulatory "CE Mark" designation to be applied for upon completion of tech transfer at scale with EU-based manufacturer.

OPPORTUNITY TO DISRUPT DIAGNOSTICS

Sona's high sensitivity gold nanorod technology has multiple diagnostic 'in-vitro' applications well beyond COVID-19, all with opportunity to gain market share from multi-billion-dollar verticals

>1B
TESTS PRODUCED IN 2017 [3]

Drugs of abuse

Detection of illegal or prescribed substances not normally found in the body

Food & beverage

Bacterial and fungal tests to monitor quality and potential contamination

Consumer health pharmaceuticals

Fertility and allergies

Medical diagnostics

Infectious diseases such as HIV, Malaria, Zika, & Ebola

Sexually transmitted infections and cardiac markers

Environmental testing

Soil, etc., contamination

Military diagnostics

Presence of pathogens (i.e. ricin, anthrax) and explosive components

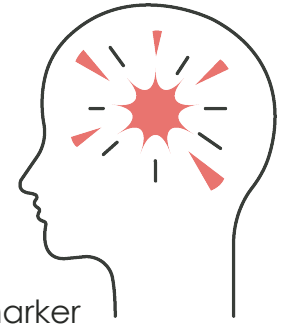
Animal diagnostics

High value livestock and pets

[3] Lateral Flow Assay Market by Product (Reader, Kit), Application (Clinical (Pregnancy, Infectious Disease, Lipid, Cardiac Marker), Veterinary, Drug Development, Food Safety), Technique (Competitive, Multiplex, Sandwich), End User - Global Forecast to 2022

SECOND COMMERCIALIZATION:

CONCUSSION SCREENING TEST



Sona is applying its GNR technology to develop a rapid concussion screening test.

The test is intended to detect the presence of GFAP (Glial Fibrillary Acidic Protein), a biological marker associated with concussions, typically released into the blood stream **within minutes of an impact to the head.**

> ***"Our goal is to develop a test that will provide immediate diagnosis at the scene of a possible concussion, that is both quicker and more definitive than the current subjective cognitive tests relied upon to assess for a concussion."***
>
> - Darren Rowles, CSO of Sona Nanotech

An estimated **10 million concussions occur each year**[1], with 2.9 million/year in the US alone, including 837,000 incidents involving children[2]. Sona's concussion test is ready to enter the prototype development stage, however, industry standard timelines for a test to reach commercialization is estimated at 12-24 months, subject to regulatory approvals.

Sona has engaged Bonham/Wills, a leading sports consulting firm, to assist in securing test development sponsorship partners.

No Such Rapid Concussion Test is Currently Commercially Available

Notes: 1) Hyder A.A. et al. The impact of traumatic brain injuries: A global perspective. NeuroRehabilitation. 2007;22(5):341–353
2) Centers for Disease Control and Prevention (2019). Surveillance Report of Traumatic Brain Injury-related Emergency Department Visits, Hospitalizations, and Deaths—United States, 2014. Centers for Disease Control and Prevention, U.S. Department of Health and Human Services.

LONGER TERM APPLICATIONS

Because they are non-toxic, Sona's gold nanorods can be used in 'in-vivo' applications in which they are used for tracking and targeting with the potential for profound implications.

IN-VITRO

Diagnostics / Detection

- Medical
- Veterinary
- Consumer health
- Military
  (pathogens and explosives)
- Food industry
  (bacteria and fungal)

IN-VIVO

Drug Delivery

Use as a carrier device to deliver payload(s) of drug molecules to cells, tissue, or organs.

Photothermal Therapy

Nanorods can be conjugated with tumor-targeting motifs and ingested. When a patient is exposed to infrared light, nanorods are locally heated, destroying only the cancerous tissue.

Cell Imaging

Produces high image quality.

Yields both qualitative and quantitative data.

More intuitive for health care practitioners to interpret.

STOCK INFORMATION

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MARKET CAPITALIZATION

Shares Outstanding	61M
Insider Ownership	13.4%
Market Cap	$72M CDN
52 Week High	$16.05
Previous Quarter Average Daily Volume	635,858

* As of November 27, 2020

RESEARCH COVERAGE

Maxim Group | Jason McCarthy, Ph.D.

MANAGEMENT & SCIENTIFIC ADVISORS

DR. KULBIR SINGH
Founder & Head of R&D

- Responsible for new product development
- Named author on 35 research papers and 2 patents
- Ph.D. in chemistry and expert in metal nanoparticle fabrication and surface chemistry

DAVID REGAN
Chief Executive Officer

- 15 years public company experience leading strategy and corporate development
- Former strategy consultant with AT Kearney
- Business and commercial operations oversight

DARREN ROWLES
President & Chief Scientific Officer

- 17 years experience with nanoparticle diagnostics, including 15 year with BBI Solutions
- Grew nanoparticle sales from $200K to $5.5M with ~$4M profit
- Advisory board member to World Gold Council and multiple university collaboration projects

PETER ROMEO
Chief Revenue Officer

- Over 20 years' experience in the medical device and pharmaceutical space, including with J&J
- Recently President of a start up Health Care Network in the Greater Hamilton and surrounding areas
- Previously Director of Sales Canada leading the Surgical business unit for Teleflex Medical Canada

ROBERT RANDALL, CPA
Chief Financial Officer

- Extensive public company experience as CFO Torrent Capital, Antler Gold and eXeBlock Technology
- Commerce Degree from St. Mary's University with CA designation in 1987 with Coopers and Lybrand Chartered Accountants

DR. CATHERINE J. MURPHY

Cathy is the Peter C. and Gretchen Miller Markunas Professor of Chemistry at the University of Illinois at Urbana-Champaign (UIUC)

DR. XU ZHANG (Dr. Shine)

Dr. Shine is the industrial research chair in applied nanotechnology at Cape Breton University, NS and a chemist with extensive experience in immunoassay and cancer research.

DR. GERRY MARANGONI

Gerry is one of the 3 founders of Sona and is the tenured professor of chemistry at St. Francis Xavier University in Antigonish, Nova Scotia, Canada

FIONA MARSHALL

Extensive experience in the lateral flow industry. Responsible for establishing a US based R&D and production facility for development and manufacture of various lateral flow tests, including tests for class 3 deadly pathogens that served US military contracts

SANDY MORRISON

President of Quality Systems Atlantic and has over 30 years of experience in the medical device industry, with leadership roles in manufacturing, quality systems and regulatory affairs

BOARD OF DIRECTORS

DR. MICHAEL GROSS, MBBS, FRCSC, ICD.D **Director**	▪ Professor of Orthopaedic surgery, medical director of the Regional Tissue Bank ▪ Director of Linear Gold (sold to Brigus Gold) ▪ Current director of Fortune Bay, Chair Boomersplus
MARK LIEVONEN, MBA, FCPA **Director**	▪ Former President of Sanofi Pasteur Limited, the Canadian vaccine division of Sanofi ▪ Co-Chair of the Government of Canada's COVID-19 Vaccine Task Force ▪ Director of OncoQuest Pharmaceuticals Inc., Biome Grow Inc., and the Gairdner Foundation
ROBERT MCKAY **Director**	▪ Accomplished entrepreneur in the hospitality, franchising and real estate industries ▪ President a private real estate development company with holdings in Canada and Mexico
JAMES MEGANN **Director**	▪ 25 years of experience in venture capital, capital markets and marketing ▪ Managing Director of Numus Financial which has completed over $1B in transactions ▪ Director of Antler Gold Inc. and Battery Road Capital Corp.
DAN WHITTAKER, MBA, CFA **Chair**	▪ Financial executive with more than 30 years' experience in the investment industry ▪ Chairman, President and CEO of Antler Gold Inc. (TSXV:ANTL) ▪ Co-founder of several publicly listed junior resource companies

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