

# **Investor Presentation**

## **Covid-19 & Beyond The ENDeMIC Game**

**Steven Goh, CEO**

**June 2022**

## **Important Notice & Disclaimer**

This presentation has been prepared by the management of the 'Company' in connection with meetings with private and institutional investors, and not as specific advice to any particular party or person. The information is based on publicly available information, internally developed data and other sources. Where any opinion is expressed in this presentation, it is based on the assumptions and limitations mentioned herein and is an expression of present opinion only. No warranties or representations can be made as to the origin, validity, accuracy, completeness, currency or reliability of the information. The Company disclaims and excludes all liability (to the extent permitted by law) for losses, claims, damages, demands, costs and expenses of whatever nature arising in any way out of or in connection with the information, its accuracy, completeness or by reason of reliance by any person on any of it.

## **“Forward Looking Statements” Disclaimer**

The documents provided contain statements related to our future business and financial performance and future events or developments involving the Company that may constitute forward-looking statements. These statements may be identified by words such as "expects," "looks forward to," "anticipates," "intends," "plans," "believes," "seeks," "estimates," "will," "project" or words of similar meaning. We may also make forward-looking statements in other reports, in presentations, in material delivered to stockholders and in press releases. In addition, Company representatives may from time to time make oral forward-looking statements. Such statements are based on the current expectations and certain assumptions of the Company's management, and are, therefore, subject to certain risks and uncertainties. A variety of factors, many of which are beyond the Company's control, affect the Company's operations, performance, business strategy and results and could cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements that may be expressed or implied by such forward-looking statements or anticipated on the basis of historical trends. Due to rounding, numbers presented throughout this and other documents may not add up precisely to the totals provided and percentages may not precisely reflect the absolute figures. The documents provided in this presentation include supplemental financial measures that are or may be non-GAAP financial measures.

# Corporate Data

Listed on SIX (Swiss Stock Exchange). The Company was founded in 2018 as a roll up of various fintech and media assets in Asia. In response to the pandemic, it transformed to a diagnostics platform company that is developing disruptive diagnostic solutions that puts people first.

Currently holds exclusive commercialisation rights to AptameX™ its reliable Covid-19 rapid test with a companion app Teman Sehat™ in Indonesia. Both launched in Indonesia in mid-2021 and AptameX™ received the CE Mark for the EU in May 2022.

Major shareholders are in Asia, in particular Indonesia hence the initial commercial interests in that country.

Employees are located primarily in Indonesia, with production in Taiwan, and an international team across the globe.

**CODE: ACHI:SWX (SIX Swiss Exchange)**  
**ISIN: CH0522213468**



## Cap Table

- 132, 653, 911 Shares
- 10,448,821 Options (ESOP)

## Key Shareholders

- 13.7m Heracles Investment Group Limited
- 10m PT Media Nusantra Citra TBK (Indonesia)
- 10m SSUG (Swiss)
- 5.2m Neural Networks
- 3.3m Monecor (London) Limited
- 2m Lotus Healthcare

## Board of Directors

## Executive Team



**ALLEN WU**

Chairman of the Board

Serial entrepreneur across media, FinTech and investments sectors across Asia and Africa



**STEVEN GOH**

Director/Chief Executive Officer

Serial Entrepreneur who founded Australia's first online stockbroking company, managed over 120 IPOs and co-founded one of the world's first social networks

Consulted to media, tech and finance. Advised dozens of incubators and startups. Appeared in CNN, WSJ, Bloomberg, Economist and many others



**DAVID HODGE**

Head of Corporate Development

Over 30 years' experience as a corporate development advisor to global companies on business transformation and strategic challenges in emerging and developed markets across healthcare, manufacturing, tech and banking and finance sectors



**ADAM O'KEEFFE**

ad interim Chief Financial Officer

Over 20 years' experience within business services and taxation with leading tech and innovation companies including health science and biotech. Expertise in finance, fundraising and statutory compliance with global clients.



**DR MICHAEL EDEL**

Inventor, AptameX

Co-founder and director of Regenacellx, specialising in Regenerative Medicine. Developing a DNA aptamer-based technology in response to Covid-19. Served as visiting academic at Harvard (2000) and Oxford (2018-19).

## Advisory Board



**CAROL AEBI**

Experienced in in technology consulting and financial industries across international organisations including AdNovum Informatik AG, UBS AG, Zurich Financial Services and Novartis



**DEREK BRANDT**

Over 25 years' medical and in-vitro diagnostics experience. Worked with international organisations (Roche, Gerresheimer) as well as small to mid size businesses in the technology and medical device industry



**GLENN CROSS**

A 40-year global life sciences veteran and former CEO/COO of Ausbiotech for 13 years. Consults and advises throughout the biotech sector on the commercialisation of science, including business development and capital raising



**CHARLES PAN**

Over 25 years' experience in investment M&A, strategic partnership, startup management and ecosystem development for East Asia and Silicon Valley. Currently Chief Investment Officer for Eastern Media Group and strategic advisor to Sigknow Biomedical, both in Taiwan

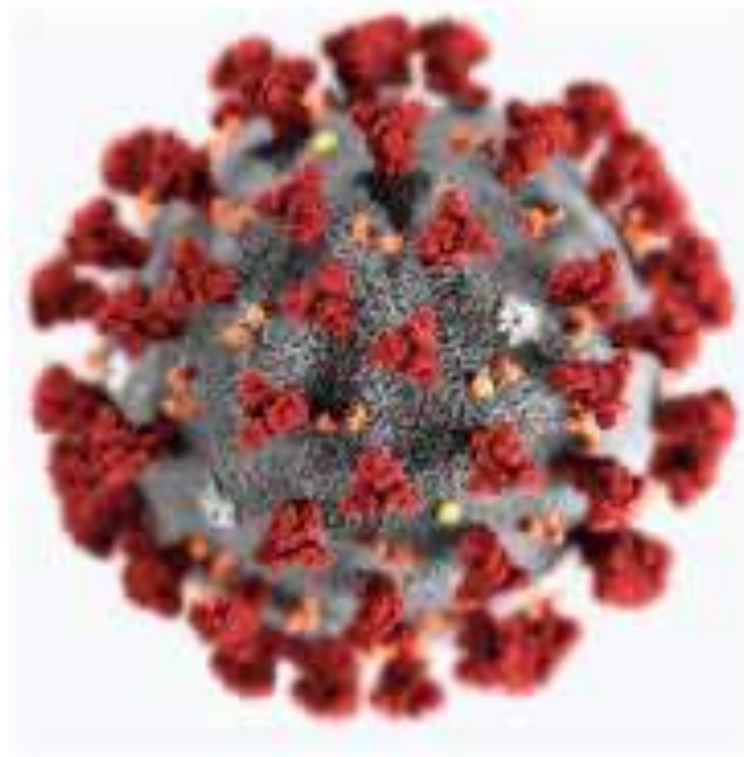
# 1981



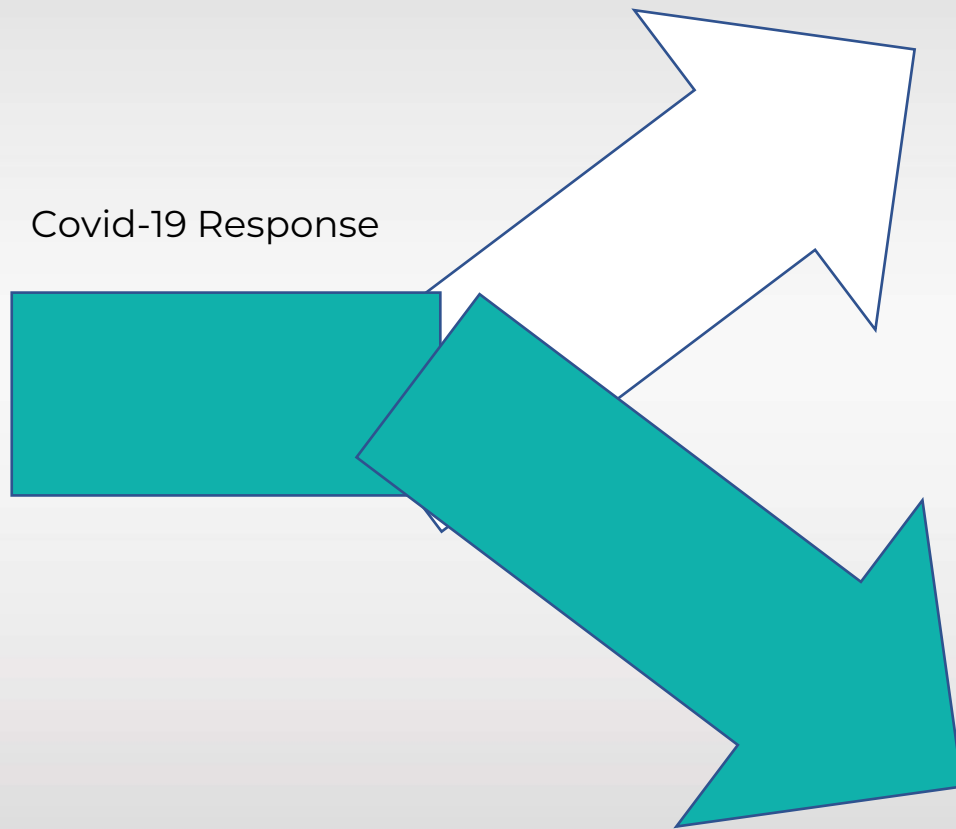
*AIDS patient Deotis McMather, shown asleep in bed at San Francisco General's AIDS ward, circa 1983. After being diagnosed with AIDS, he returned to his apartment where all of his belongings had been thrown out onto the street.*

*Steve Ringman/San Francisco Chronicle/Getty Images*

2 years ...



# The New Normal



## PANDEMIC

- Emergency Testing (RAT / PCR)
- Test and Trace (ie Checkins)
- Lockdowns
- Quarantines
- Social Distancing

## ENDEMIC

- Practical Testing (RAT / New)
- Test and Treat (Therapeutics)
- Regular Vaccination
- Healthcare Capacity Management
- Social Distancing
- Ready for the next wave

References :

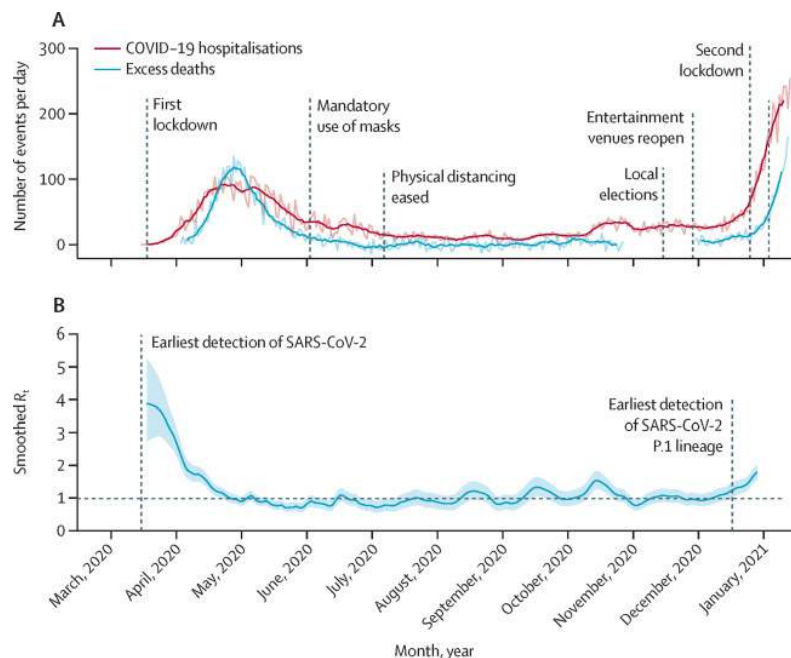
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2291729/> Nucleic Acid Aptamers for Target Validation and Therapeutic Applications

<https://www.bmj.com/content/bmj/370/bmj.m2516.full.pdf> Diagnostic accuracy of serological tests for covid-19:systematic review and meta-analysis



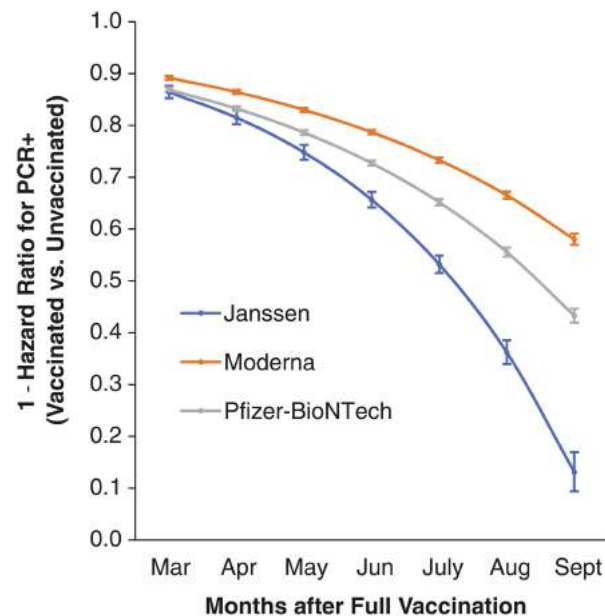
# Vaccines Wane...

Immunity through exposure to wild type Covid-19...



Source: [https://www.thelancet.com/article/S0140-6736\(21\)00183-5/fulltext](https://www.thelancet.com/article/S0140-6736(21)00183-5/fulltext)

Immunity through vaccination...



Source: <https://www.science.org/doi/10.1126/science.abm0620>

In spite of long run serological evidence for immunity, effective sufficient immunity through exposure or vaccination appears to last 6-8 months before requiring a fresh exposure (e.g. through vaccination).



# Testing is broken ...

## PCR

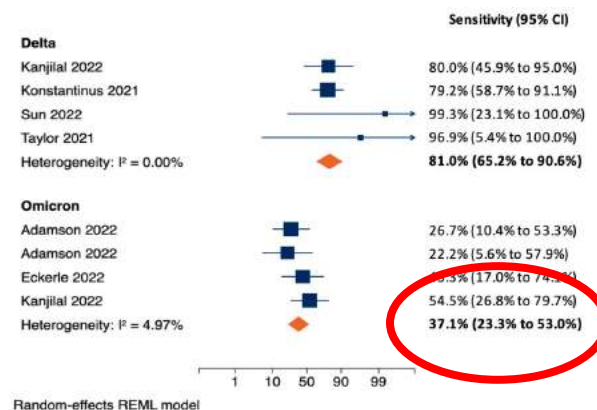


Accurate but .. Invasive,  
Expensive, Slow

## Rapid Antigen



Faster and cheaper, but many are not sensitive to the new variants (e.g. Omicron)



# Achiko has a unique test...



 AptameX

- **Friendly:** Minty mouthwash and spit into a tube.
- **Accurate:** Differentiated chemistry means we can detect low viral loads and new variants.
- **Fast:** With the reader, results in under 15 minutes.
- **Affordable:** cost of a cup of coffee at Starbucks (under CHF8).
- **Scalable:** Approved with a CE Mark and Indonesia MoH.
- **Wide Ranging:** In development for a range of other pathogens.

# Why DNA Aptamers?

**Aptamers** are single-stranded DNA or RNA oligonucleotides that bind to specific targets via shape recognition, with high affinity and specificity. They are synthetic, can be produced cheaply and in scale.

## Compared to an Antigen / Enzyme

The use of an aptamer has many advantages over the use of an antibody, including an equal or superior affinity and specificity to the target, a smaller size, easier modification and immobilisation, better stability, higher reproducibility and lower costs<sup>1</sup>

## Future

Material advantages in aptamers allow for new testing formats that are degradable, more robust and less precise antigenic approaches may yield. Formats include electronic biosensors, microfluidics and other formats.

**Summary:** AptameX represents the first massive scale use of DNA aptamers versus classical antigenic approaches to rapid tests and is positioned for greater success as the platform allows for new testing formats at scale.

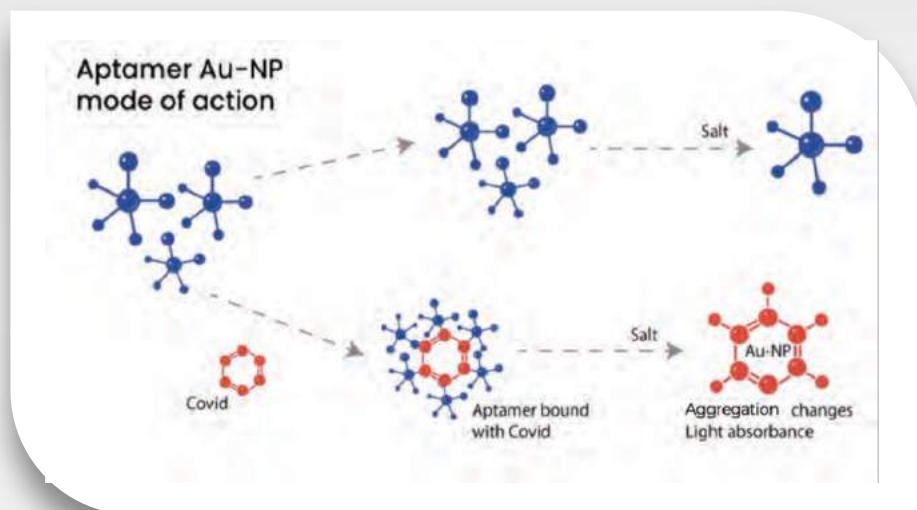
<sup>1</sup> "Aptamers and Their Biological Applications", Song, Lee and Ban, 2012 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3279232/>

<sup>2</sup> "Application of Aptamers in Virus Detection and Antiviral Therapy", Zou, Wu, Gu, Shen and Mao, 2019. <https://www.frontiersin.org/articles/10.3389/fmicb.2019.01462/full>

# Chemistry



**COVID-19 DNA APTAMER  
GOLD NANOPARTICLE TEST KIT**



**References :**

- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2291729/> Nucleic Acid Aptamers for Target Validation and Therapeutic Applications
- <https://www.bmj.com/content/bmj.m2516.full.pdf> Diagnostic accuracy of serological tests for covid-19: systematic review and meta-analysis

- DNA aptamers are conjugated to gold nanoparticles
- Upon binding between the S1 virus protein and the aptamer, gold nanoparticles are released
- When gold nanoparticles are released, they aggregate causing a color change in the solution
- Colorimetric assay: reader detects the color change
- Software developed to analyse color change (shift in spectra) and designates positive or negative results

# That outperforms other tests...

Covid-19 testing is typically performed using a Nasal Swab and falls into either a PCR test (highly accurate), or a Rapid Test (typically Antibody / Enzyme based). Covid-19 has typically been spreading at lower viral loads (~28.3 for original wild type to over 30 for Omicron), raising the issue of sensitivity of a test being crucial.

**Performance characteristics of the rapid antigen detection kits for the presence of SARS-CoV-2 virus in respiratory specimens**

	<b>Panbio</b> <i>Abbott</i>	<b>Respi-Strip</b> <i>Coris Bioconcept</i>	<b>Nadal</b> <i>Nal von Minden</i>	<b>Standard Q</b> <i>SD Biosensor</i>	<b>AptameX</b> <i>Achiko*</i>
<b>Low Ct</b>	15.30: 100%	16.70: 77.8%	16.27: 100%	16.70: 100%	17.6: 100%
<b>Mid Ct</b>	22.85: 83.3%	24.07: 6.6%	23.77: 16.7%	24.07: 75.0%	
<b>High Ct</b>	31.43: 11.1%	31.82: 0%	31.50: 0%	31.83: 0%	30.5: 100%
<b>Overall</b>	23.33: 68.6%	24.39: 22.9%	23.61: 34.4%	24.39: 60.0%	28/29: 100%

**REF1:** "Evaluation of rapid antigen detection kit from the WHO Emergency Use List for detecting SARS-CoV-2" by Gannon C. K. Mak, et al. Journal of Clinical Virology, Vol 134, Jan 2021, 104712

**REF2:** "Analytical sensitivity and clinical sensitivity of the three rapid antigen detection kits for detection of SARS-CoV-2 virus", Gannon C. K. Mak et al., Journal of Clinical Virology, Vol 133, Dec 2020, 104684

\* Specimen type: nasopharyngeal aspirate & throat Swab | **CT value:** Sensitivity (%)

\*\* Performed in preproduction materials at the end of December 2021,

# Initial Commercialisation Pathway

## **Lab work in Spain, Taiwan and Indonesia**

- Validates AptameX ability to detect Covid-19 at low viral loads and new variants

## **Sales & Marketing Agreement with Nahdlatul Ulama**

- World's largest Islamic association in Indonesia with 90 million registered members
- Operates over 6,000 schools & universities and several hundred hospitals and clinics

## **Expanded collaboration with PT Indopharma TBK (Production Partner)**

- Indonesia's oldest medical devices company with national reach
- Organising production of initial 1mn test kits to meet demand, increasing to 5mn per month within 6 months and 10mn per month within 12 months
- Includes aptamer-based diagnostics for dengue and other diseases

## **Achieved CE Mark**

- Ability to market and sell AptameX to 27 EU countries
- Accelerates entry to other markets that requires a CE mark as one of the preconditions of commercial participation

# Delivering Testing in Indonesia

## Raw Materials Supplier

### Taiwan



DNA Aptamers



Conjugate



UV-Spectrophotometer

### Indonesia



HPLC Water & Salt Solutions



Printings & Packaging



Tubes, Cuvettes & all plastics



## Manufacturing Partner



One of the oldest pharmaceutical companies, partly owned by the government and part of BUMN Farmasi Holding.

Assembles AptameX using toll manufacturing

## Distributing Partners



Leading distributor of medical and diagnostic devices with a vast network into government, healthcare institutions and retail markets.



INDONESIA FARMA MEDIS

Medical device and pharmaceutical distribution company with a large network of relationships and distribution channels that includes hospitals, pharmacies and clinics.

## Sales & Marketing Agreement



Nahdlatul Ulama – world's largest Islamic association:

- 90mn registered members
- 6,000 schools
- 600 clinics & hospitals



Finished Covid-19 diagnostic kits

Achiko is collaborating with leading industry suppliers, manufacturers, and distributors in Indonesia, a country of 270mn people spread over 6,000 islands, to deliver testing and assurance services to the public, through B2B channels, and working also with Nahdlatul Ulama, the world's largest Islamic association with over 90mn registered members in Indonesia.



# Indicative Test Economics

## AptameX Indonesia Indicative Economics (USD)

	Per Test	Tests Per Mth	
		5Mn	10Mn
<b>Net Sales *</b>	<b>2.70</b>	<b>13.50</b>	<b>27.00</b>
Material Cost	0.25	1.25	2.50
Operating Cost	0.50	2.50	5.00
Distribution Cost	0.81	4.05	8.10
<b>Total Costs</b>	<b>1.56</b>	<b>7.80</b>	<b>15.60</b>
<b>Operating Profit **</b>	<b>1.14</b>	<b>5.70</b>	<b>11.40</b>

\* Net of Tax

\*\* Excludes Royalty

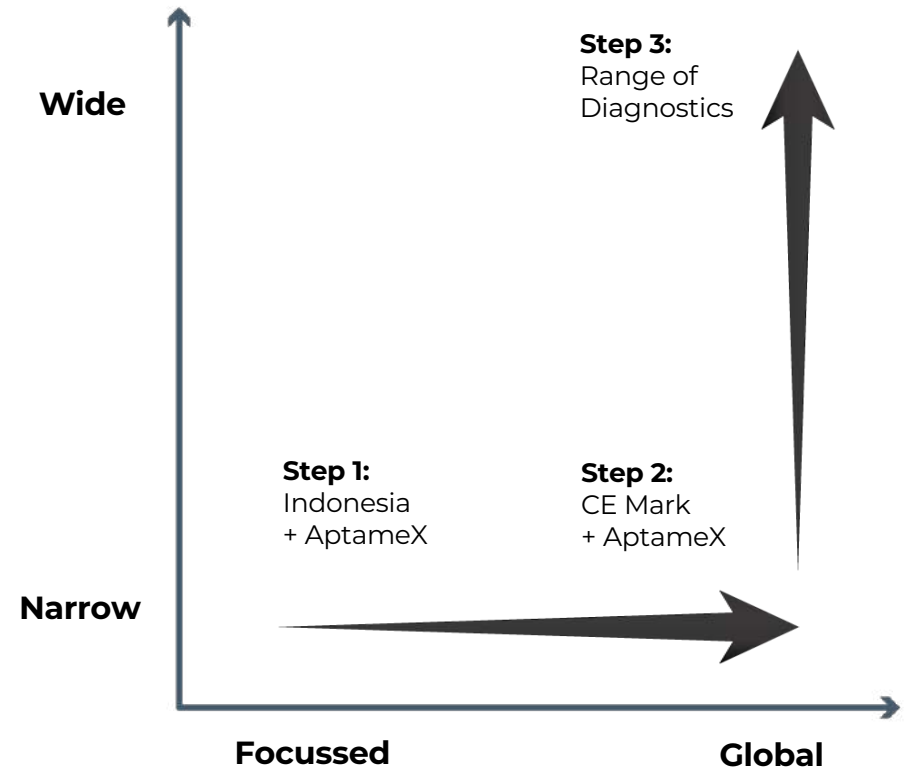
- Initial Selling Price ~ USD 3.40 per Test
- Scaling up production after 6 Months, expected to reduce to USD 3.00 or less
- Per Test economics based on Selling Price of USD 3.00 (before tax)
- Indicative material costs ~ USD 0.50, reducing to USD 0.25 or lower
- Indicative Operating Cost ~ USD 1.00 reducing to USD 0.50 or lower with higher volumes
- Distribution Costs ~ 30% of Net Sales
- AptameX target monthly sales of ~ USD 13.50mn after 6 months doubling to USD 27mn after 12 months \*

\* May change depending on business and other conditions

# AptameX Product Strategy

**AptameX** is a breakthrough Covid-19 Rapid test that offers an easy to use, low cost, and heightened sensitivity (through the use of DNA Aptamers and not Antigens), as a Platform working with Teman Sehat (Health Buddy).

- **Step 1:** Launch AptameX (a breakthrough Covid-19 Rapid Test) with Teman Sehat in Indonesia.
- **Step 2:** Replicate to other geographies through a CE Mark, and localization, and open up Teman Sehat to other Telehealth Platforms.
- **Step 3:** Introduce other diagnostics into the channel won with Aptamex / Teman Sehat(e.g Dengue, others)



## The Way Forward ...

- Capitalise company
- Move to profitability in 2H 2022
- Broaden product profile
- Update Board and Management to align shareholders, company with opportunity

**ACHIKO**

# Achiko AG

Tessinerplatz 7

8002 Zurich

Switzerland

Email: [ir@achiko.com](mailto:ir@achiko.com)

Website: [www.achiko.com](http://www.achiko.com)