



BRICS Women's Startups Contest

# POCT LFT Technology and Health Screening Project

- Zhejiang Greylynx Biotech Co.,Ltd.

2024.7



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## Introduction of Project

<b>Project leader</b>	Zhou Li (General Manager)
<b>Company name</b>	Zhejiang Greylynx Biotech Co.,Ltd.
<b>Source of Investment</b>	China (51%) , Germany(49%)
<b>Technology</b>	POCT LFT
<b>Year of Company Establishment</b>	Year 2022
<b>Time to production</b>	Q4 year 2023
<b>Estimated revenue</b>	30~50 million \$ per year



## Huge Burden and Big Gap



- **>40% global health burden**
  - BRICS countries, which account for about 40% of the global population and about 40% of the global burden of disease, face the big health security challenges.
- **10/90 gap**
  - The "10/90 gap" which between the North and the South in public health is widening and it is a grim reality that global public health governance must face.
- **Ensure universal health coverage**
  - The 2013 BRICS Health Ministers' Joint Communiqué reaffirmed that "the BRICS countries support the resolution on universal health coverage adopted by the United Nations General Assembly and are committed to working at the national, regional and global levels to ensure universal health coverage





## Heavy Threat of Infectious Diseases

### Tuberculosis, AIDS and tropical diseases

In the BRICS countries, because of dense populations and poor sanitation facilities, tuberculosis, HIV/AIDS and tropical diseases are the most common infectious disease killers.

01

30% & 30%

About 30% of the world's people living with HIV live in BRICS countries. Only 30% people living with HIV have access to effective HIV treatment.

02

03

1 billion & 50%

1 billion people suffering tropical disease globally. India alone accounts for 50% of the total Lymphatic filariasis patients worldwide





# The health situation now in BRICS countries



## More challenges from Other Diseases



**80% VS 65%**

Non-communicable diseases (Cancer, diabetes, cardiovascular disease, etc) account for 65% of all global deaths each year, with low- and middle-income countries accounting for 80% of them.



**72% & 85%**

In Brazil, Non-communicable diseases account for 72% of all deaths each year; In China, the figure is 85%;



**1.3 million**

In Russia, cardiovascular disease alone is a chronic disease that kills 1.3 million people every year;



**800,000**

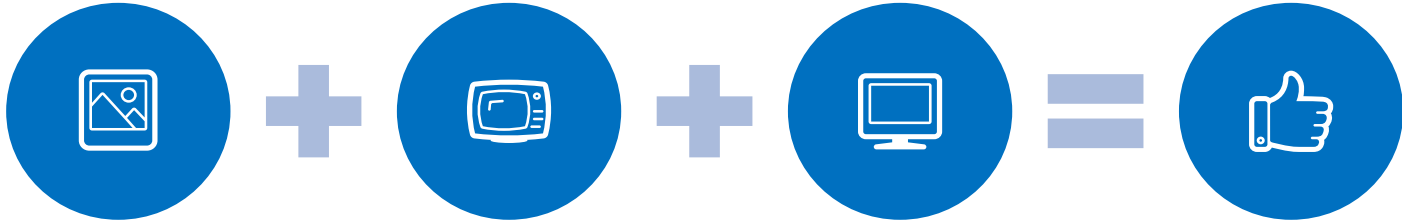
In India, where tobacco prevalence is high, there are 800,000 new cases of cancer each year



# Key resolution to Improve the situation



Enhance the Ability of Primary care



## More facility

To provide more primary care facility to cover more population

## Easier products

To provide easy of use products which can match the ability of end-users

## Less cost

To provide cheaper products and make them available everywhere

## Better care

To give better health care solutions for more popular





# What we can help to Improve the situation

We provide POCT products, Perfect for Prime care

## Current problem

## Our Product

### Facility required

Centralized medical equipments & big investment

No equipments required,  
Easy of use

### Waiting period

Hours to days

<15 minutes

### Medical expense

High expense  
(Tens to hundreds of dollars)

Low expense  
(<10 dollars)





# What we can help to Improve the situation

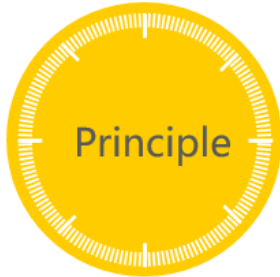
We provide >100 products, Infectious Diseases and all



- Drugs of Abuse
- Infectious Diseases
- Hormone
- Tumor Markers
- Cardiac Markers

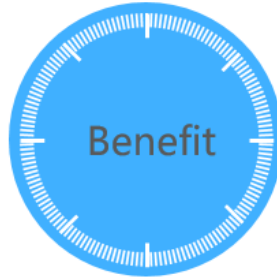


# Benefits of our Technology



## High specificity

Antigen-antibody  
immunological  
chromatography  
reactions to provide  
high specificity



## Low cost easy of use

Incomparable  
advantages on  
Sample, testing time,  
personnel skills, costs,  
and other aspects



## > 100 tests

more than 100 test  
items for infectious  
diseases, hormones,  
myocardium, tumors,  
drug abuse, etc



## Early prevention and treatment windows

The early diagnosis,  
treatment and prevention  
of major diseases have  
produced huge social and  
economic benefits

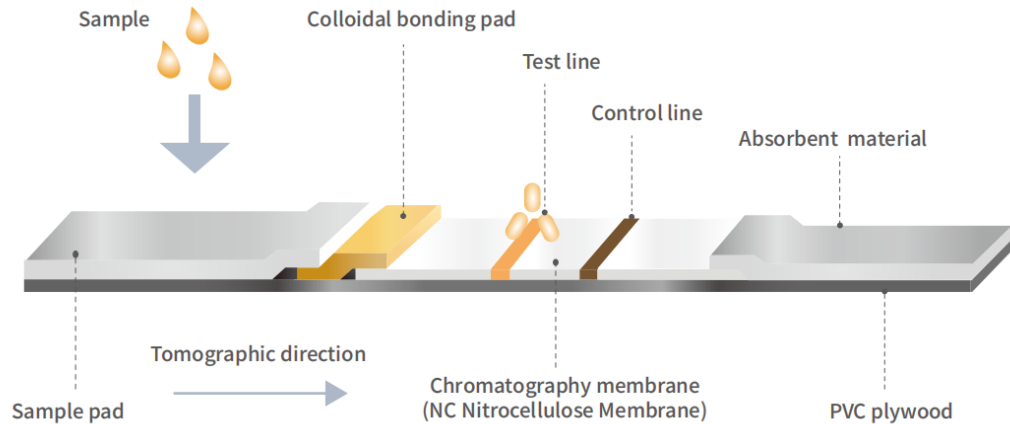


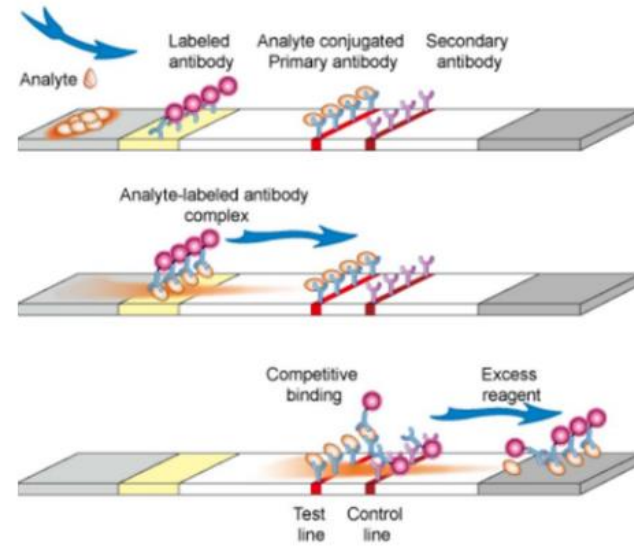
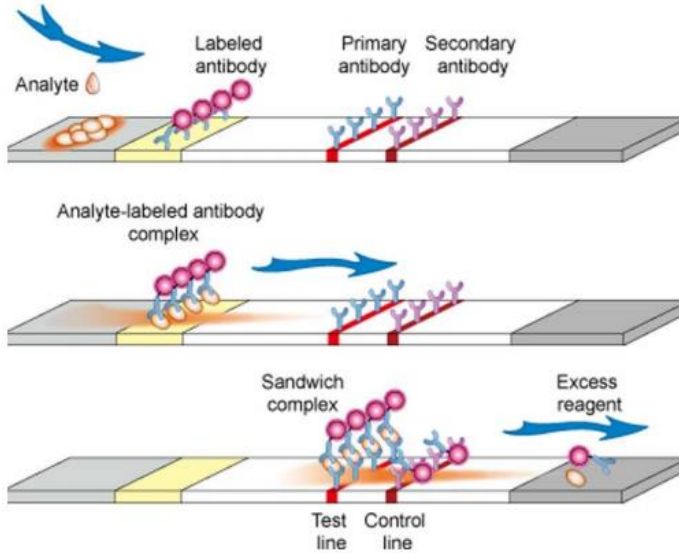


The technique is based on biochemical interaction of antigen-antibody.

The LFT test assay is composed of four parts:

- **sample pad**---the area on which sample is dropped;
- **conjugate pad**---abeled tags combined with biorecognition elements;
- **reaction membrane** -- test line and control line for target antigen-antibody interaction;
- **absorbent pad**---reserves waste.

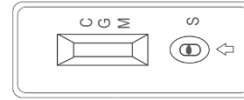




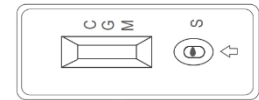
# Description of our Technology



1 drop of sample (about 30-45  $\mu\text{L}$ )



1 drop of buffer (about 35-50  $\mu\text{L}$ )



Urine



Oral Fluid



Blood





Series	Test Parameters
Infectious Disease	HIV, HCV, HBV, Syphilis, Malaria, Dengue ,etc..
respiratory tract Disease	SARS-CoV-2, Influenza A+B, RSV, monkeypox ,etc..
Cardiac Markers	CTN-I, CK-MB, D-Dimer, MYO, H-FABP, NT-ProBNP, Combo, etc..
Drug of Abuse	Marijuana, Cotinine, Amphetamine, Benzodiazepines ,etc..
Hormones	$\beta$ -hCG, TSH, T3, T4, LH ,etc..
Tumor markers	PSA, AFP, CEA, iFOB ,etc..
Others	FER, Vitamins, etc..



# The significance of the project in the BRICS market



## The challenges of health care situation now in BRICS market :

- Large and aging population cause a huge demand for primary care, especially for chronic disease testing
- Infectious diseases, tropical diseases have a high prevalence, are highly contagious, and early screening is insufficient
- The coverage rate of health insurance is increasing year by year, and it can cover a larger group of people

## Our project will help to:

Speedup the setting of primary healthcare facilities

Simplify rapid screening for critical illnesses

Reduce the cost for medical testing





# Why BRICS market Need Us?

Big Potential Requirement of IVD Products in BRICS



Global In Vitro Diagnostic Market; Major Country/Region Markets, 2023 and 2028 (\$ millions) )

Country	2023	2028	CAGR
China	5,855	7,960	6%
Brazil	1,610	1,972	4%
India	1,291	1,541	4%
Russia	1,199	1,331	2%
South Africa	356	412	3%

Source: Kalorama





# Why BRICS market Need Us?

We Provide the Desired products during urbanization



## Market Potential by Total Population, and Percent Urban 2020

Country	2020 Pop million	% Pop urban
China	1,394	61
India	1,325	35
United States	333	83
Brazil	212	87
Russia	143	75
Mexico	129	81
Egypt	104	43
Vietnam	102	37
Turkey	82	76
S. Africa	56	67
S. Korea	52	81
Colombia	50	81
Ukraine	44	70
Poland	38	60
Canada	38	82

During the increases of urbanization ,we need to provide more healthcare products to its rural population.

Source: Kalorama



# The Advantage of the Project

Compare with Other Technologies



## Multiple tests

- Up to 28 tests in one sample at a time;
- Detect > 100 items base on same technology platform

## Easy of Use

1 Step operation  
sample in—result out

## Less cost

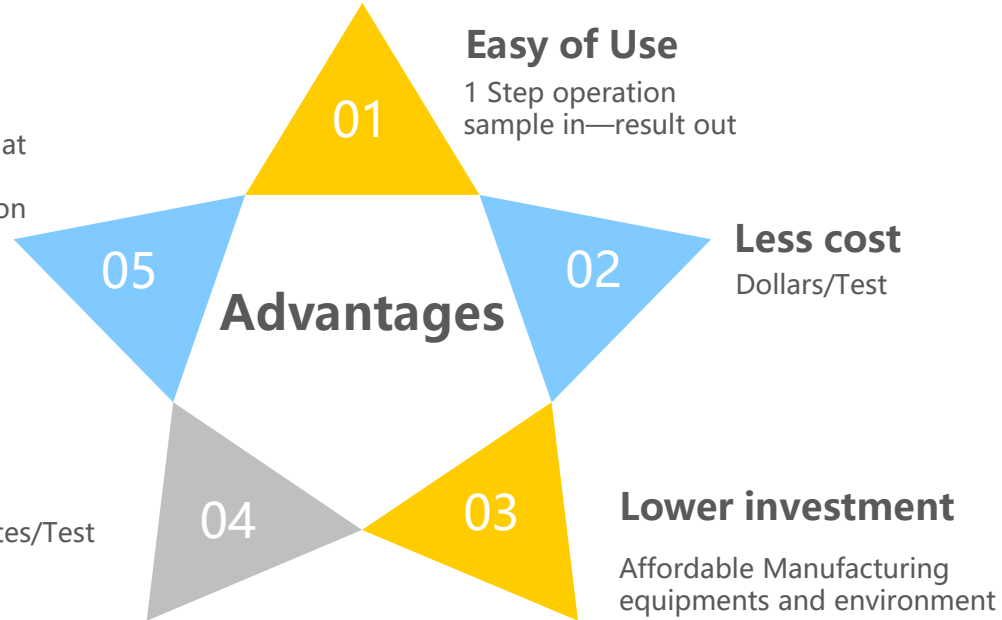
Dollars/Test

## Fast

3-15 munites/Test

## Lower investment

Affordable Manufacturing equipments and environment



# The Advantage of the Project

Compare with Other Companies



**Higher Sensitivity**

**Semi-Qualitative**

VS Quantitative

**More Efficient**

**Multiple Tests**



**More Experienced Team**

Above **20 years** Experiences  
in IVD Field





## Huge Markets

- > 100 tests for Infectious disease, Oncology, cardiovascular disease.
- Early diagnosis and early treatment save time and avoid costly delays.

## Improve inspection efficiency

- Easy to use products.
- Reduce the waiting time from hours/ days to minutes
- Multi-scenario application: primary medical care/individuals

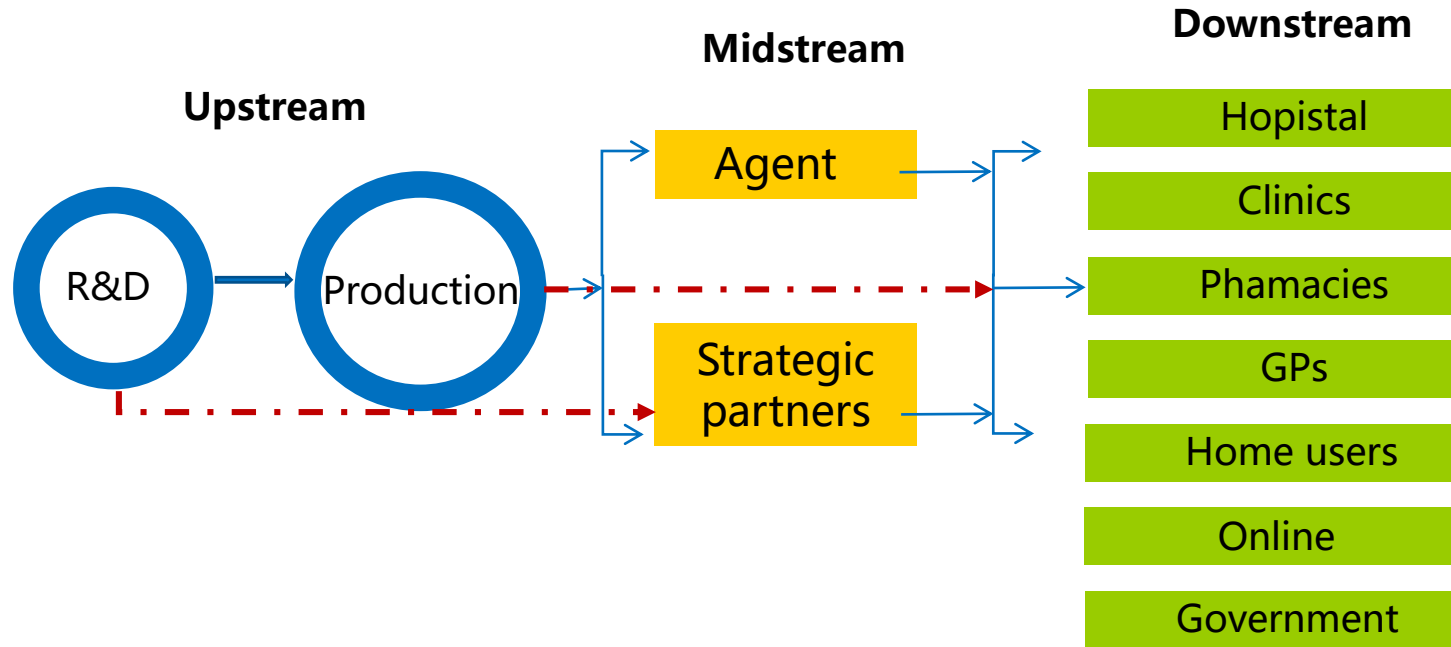
## Less investment

- The initial investment in equipment and facilities < 2 million\$
- <30 management personnel required initially

## Local Production

- Open to transfer technology to enhance local technical capacity
- Set up factories in BRICS countries to increase employment





## Uniqueness

1

Product Features: Easy to use, low cost

2

Sales Pattern

3

Product Cooperation Model

## Match with the BRICS

suitable for development of primary medical care

Cover multi-tier agents

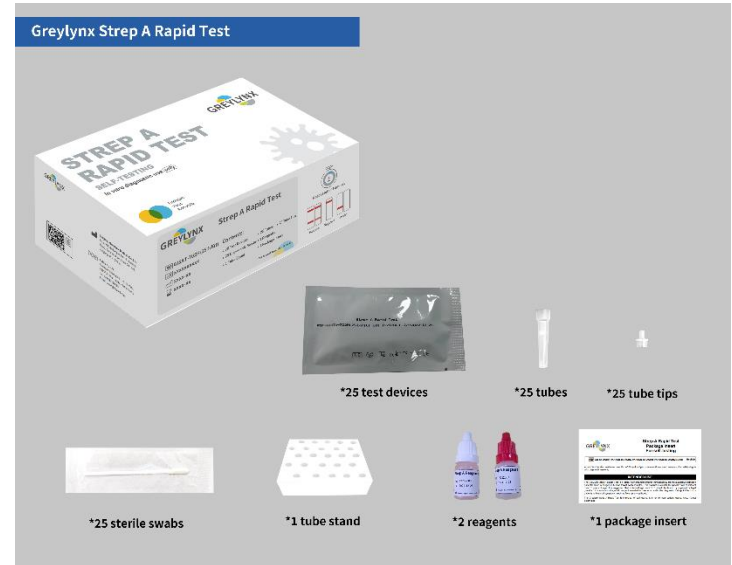
Local production to reduce costs & increase employment

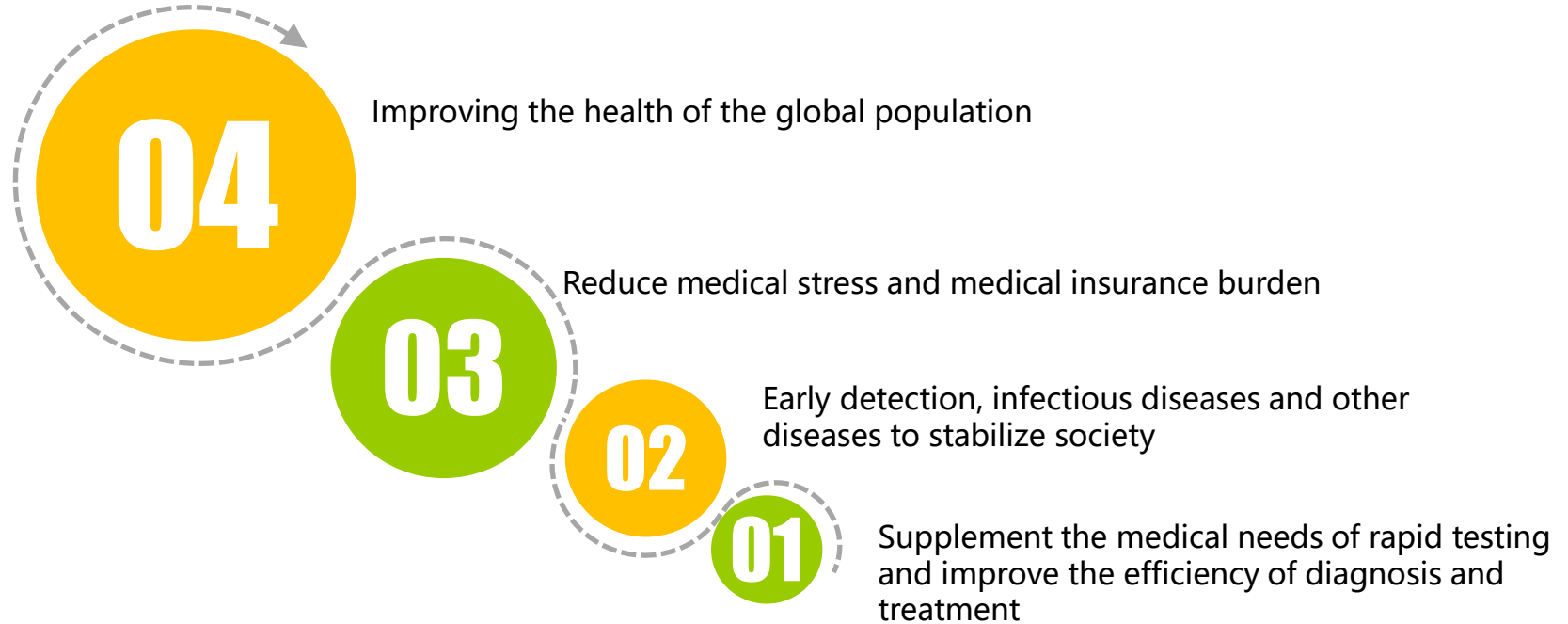




# Experience of cooperation with BRICS countries

- Year 2023, Started the cooperation with agents in Brazil on infectious disease products, target as millions US dollars.
- Started to cooperate with well-known local companies in Brazil to jointly establish factories in the local area.
- Cooperate with local agents in India in semi-finished products and technology transfer





# Financial metrics



**Expected to be profitable in 3<sup>rd</sup> year of production)**

Average EX work Price (\$/pcs test)			
Year	2 <sup>nd</sup> Year/ 2024	2025	2026
EX work Price	US\$ 0.25	US\$ 0.23	US\$ 0.21

Expected Sales Volume			
Year	2 <sup>nd</sup> Year/ 2024	2025	2026
Sales Volume (tests)	20 million	60 million	100 million
Expected Sales Revenue			
Year	1 <sup>st</sup> Year/ year2024	2025	2026
Revenue	5 million \$	13.8 million \$	21 million \$



# Financial metrics



**Expected to be profitable in 3<sup>rd</sup> year of production)**

Expected Cost and Margin			
Year	2 <sup>nd</sup> Year/ 2024	2025	2026
Expected Average Cost ((\$/pcs test)	US\$ 0.2	US\$ 0.18	US\$ 0.14
Expected Total Cost	4 million \$	10.8 million \$	14 million \$
One-time investment (R&D, Equipment & Facilities*)	1.5 million \$	0.7 million \$	0.7 million \$
Gross profit (after deducting one-time investment)	-0.5 million \$	2.3 million \$	6.3 million \$
Estimated personnel and other expense	0.4 million \$	0.7 million \$	1.5 million \$
预计净利 (万元人民币)	-0.9 million \$	1.6 million \$	4.8 million \$

\* Equipment and facilities can actually be depreciated according to 10 years





# THANKS!



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