

BGI 华大

华大基因
BGI

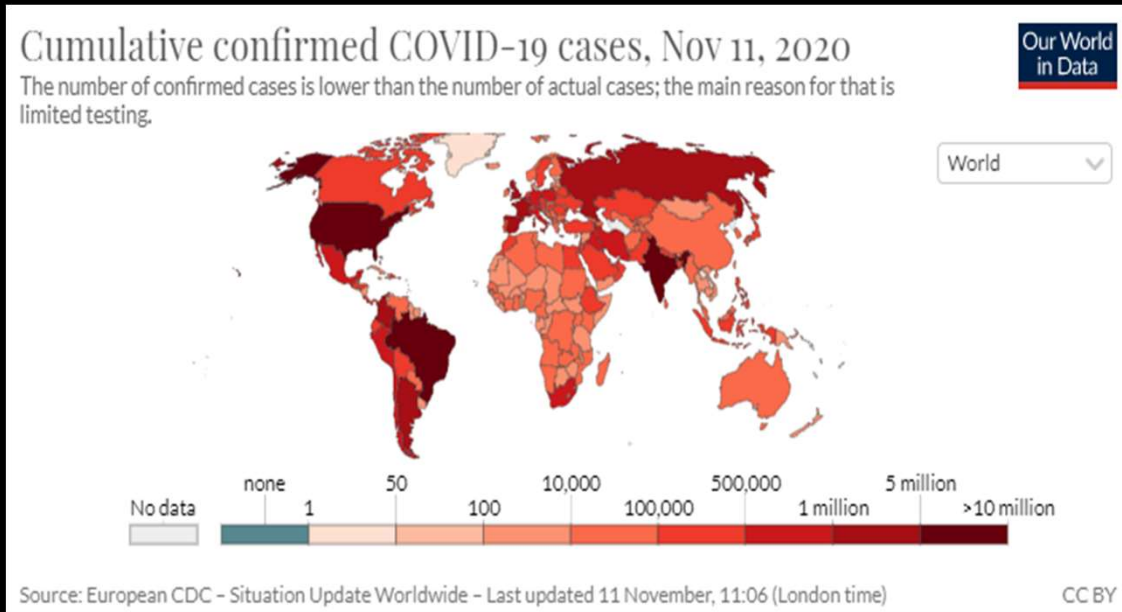
MGI
华大智造

Huo-Yan
Laboratory



BGI's Efforts Fighting Against COVID-19 Pandemic

Worldwide COVID-19 status



Graph of total confirmed cases on Nov, 11 2020

Source: Our World in Data

Hundreds of Millions of People are affected by COVID-19

COVID-19 has been continuously spreading all over the world. Some countries even encounter with a second wave. It not only harms living health but also hampers the development and economy, education, etc.

■ COVID-19 tests matter a lot



At the media briefing on COVID-19 on March 16, 2020, the WHO Director General Dr Tedros Adhanom Ghebreyesus said:

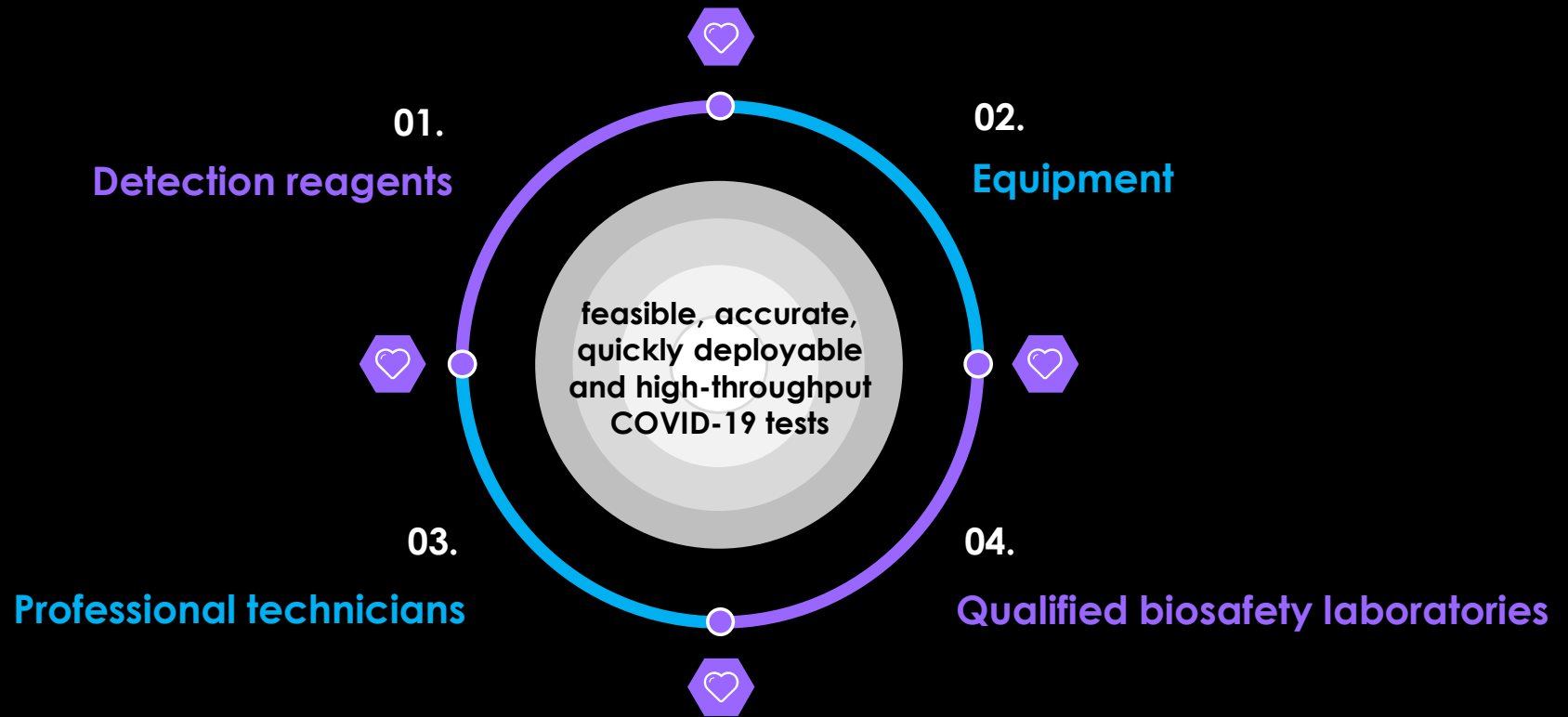
We have a simple message for all countries: test, test, test.



On the 3 of May, the heute journal — one of the most important news magazines on German television— was passing the following idea

Test, test, test—that is the credo at the moment, and it is the only way to really understand how much the coronavirus is spreading.”

■ What are needed for COVID-19 tests

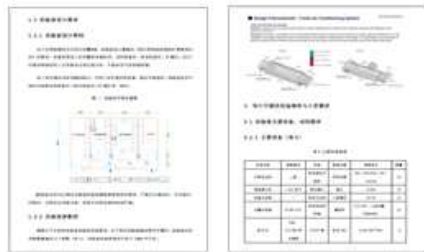


What are developed by BGI in response



Huo-Yan Laboratory, one-stop solutions that provide:

1. Global cutting-edge technology and knowledge integration capability;
2. Quality and cost control on IVD product and materials in China;
3. Well trained and sufficient technicians and engineers;
4. Quality management system of Medical Laboratory



Construction plan



Equipment & Reagents for testing laboratory



New or renovated laboratory



Huo-Yan Air Lab



Huo-Yan Container Lab



Certification



The first Huo-Yan laboratory built in 10 days, can detect over 10, 000 samples per day



Huo-Yan Air Lab



Huo-Yan Air Lab with membrane structure, can be strategically reserved and quickly deployed to timely respond to emergency public health crisis.



5 function areas
Single-layer PVC
Positive air pressure

2 function areas
Double-layer PVC&TPU
Negative air pressure

3 function areas
Double-layer PVC&TPU
Negative air pressure
Smart control



Low cost

It saves cost and labor time. Prefabricated technology controls quality and reduces artificial technical requirements.



Quick Installation

It can be installed quickly, and the integrated design offers a quick layout.



Foldable Transportation

It can be folded for storage and transportation. The compressed volume is relatively small which supports convenient transportation



Flexibility

Lab solutions can be customized according to different detection capacity needs and site selections.

Huo-Yan Container Lab



High-throughput

Fast to deploy

Portable power supply

Expandable

BSL-2

Intelligent and portable



Nucleic acid detection kits



SARS-CoV-2 nucleic acid detection kit
(Oligo probe sequencing method)

SARS-CoV-2 nucleic acid detection kit
(Fluorescent RT-PCR method)

Gene sequencer



High-throughput sequencer
MGISEQ-200



High-throughput sequencer
MGISEQ-2000 FAST



High-throughput sequencer
MGISEQ-2000



High-throughput sequencer
DNBSEQ-T7

Automated sample preparation system



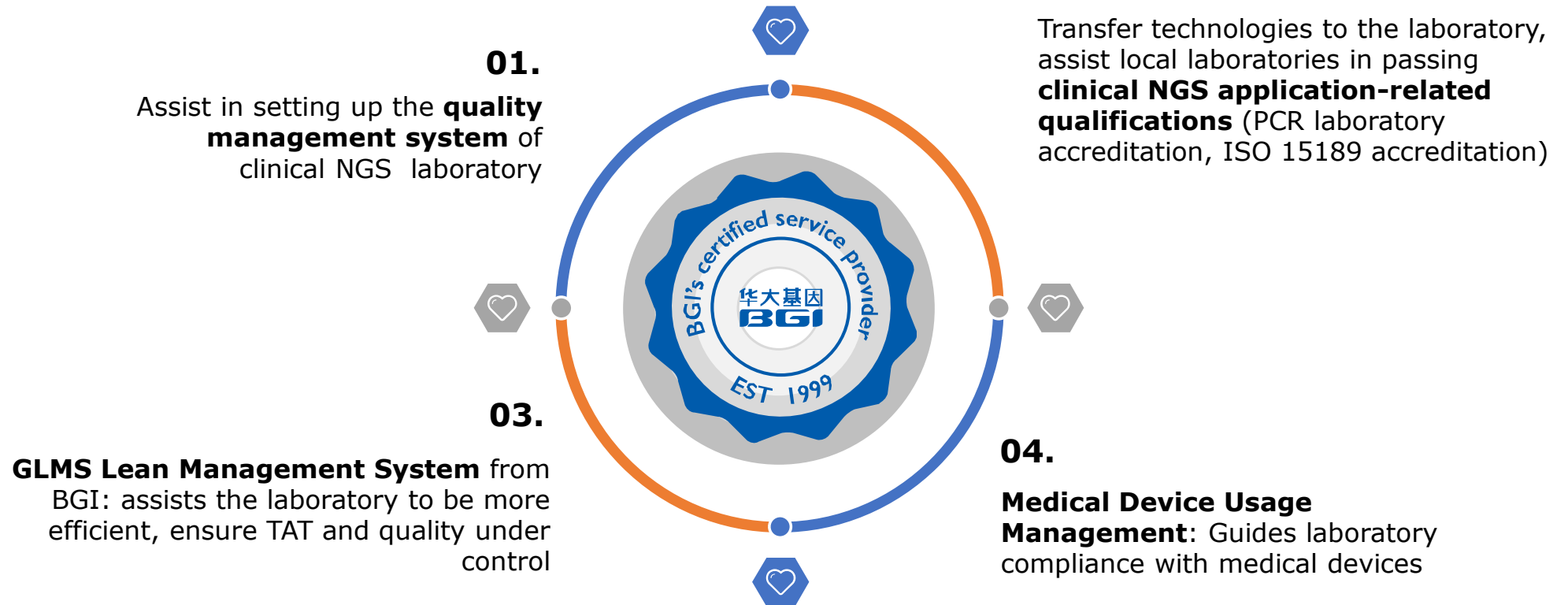
MGISP-100



MGISP-960

- Dual functions of nucleic acid extraction and automatic sample preparation
- Compatible with both PCR instrument and gene sequencer

For medical institutions, independent clinical laboratories
Provide quality improvement services for BGI NGS Medical Laboratory



Cooperation with 30+ Ministry of Health



Covering 133 Countries

WHO purchased BGI's RT-PCR kits and donated to 133 countries, which including 44 African countries.

Establish Government Relations

WHO has strong government / channel relationship with countries / regions
WHO introduced UN, WFP and other international organizations to continue to purchase products from BGI.

30+ PO Orders

More than 4 million tests of RT-PCR kits, 3.5 million of sampling kits, 500 magnetic frames and biosafety bags have been ordered

New Business Opportunities

Working with the WHO and the Gates Foundation to launch the Huo-Yan Air Lab in Africa



World Health Organization



火眼实验室全国分布 Huo-Yan Lab in China



By June 30, BGI had set up “Huo-Yan” laboratories in 16 major cities including Beijing, Wuhan, Shenzhen and Tianjin, and the maximum daily detection capacity exceeded 200,000 test

火眼实验室全球分布 Huo-Yan Lab around the World



By June 30, BGI has completed construction of 58 Huo-Yan laboratories with governments or partners in more than 17 countries.



Huo-Yan Laboratory, Sri Lanka



Huo-Yan Laboratory, the Philippines



人民日报图文数据库 (1946-2020)

菲律宾首座“火眼”病毒检测实验室落成

《人民日报》(2020年05月11日 03版)

本报曼谷5月10日电 (记者赵益普) 马尼拉消息: 由中国企业承建的菲律宾首座“火眼”病毒检测实验室9日在菲北部圣费尔南多市何塞·林格纪念总医院正式落成。该实验室将大幅提升菲律宾新冠病毒检测能力。

在落成仪式上, 菲律宾卫生部长弗朗西斯科·杜凯表示, 菲律宾正处于抗击疫情的关键时刻, 菲中两国开展了良好的抗疫合作。“火眼”实验室将为菲律宾抗击疫情提供巨大帮助, 更加坚定全民战胜疫情的信心。菲律宾内务部长诺格拉莱斯表示, “火眼”实验室将切实提高菲方防疫能力, 对下一步复工复产起到非常重要的作用。

该实验室由中国华大集团承建, 采用了中国自主知识产权的自动化平台, 每天可检测3000人份新冠病毒样本。

Application case: Libreville, Gabon



On May 19, President Ali Bongo Ondimba of the Gabonese Republic visited the Huo-Yan Air Lab installed in Libreville. This is **the first Huo-Yan Air Lab utilized outside China**. This laboratory, with the **daily detection capacity of over 10,000 samples**, becomes the largest virus detection laboratory in Gabon. It greatly improves the local capabilities of epidemic prevention and control as well as nucleic acid detection.

Application case: Nur-Sultane, Kazakhstan BGI



On June 6, construction of Huo-Yan Air Lab in Nur-Sultane was completed. The Mayor and the Minister of MOH paid a visit there.

Currently, the daily detection capacity is **1,000 sample** and it could be expanded to 5,000 if needed.

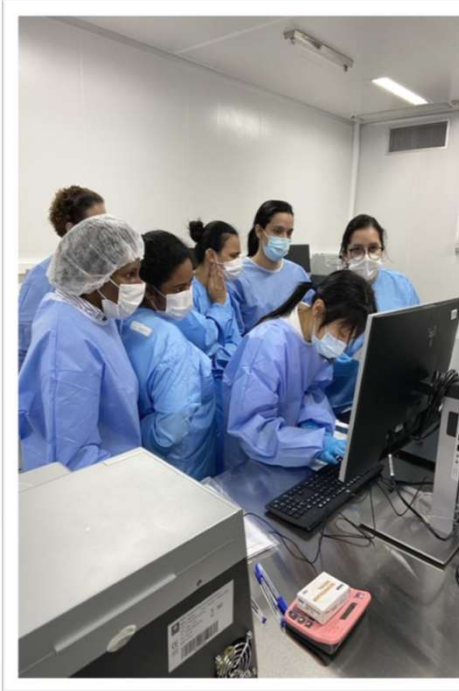
Application case : Medina, Saudi



On May 25, construction of Huo-Yan Air Lab in Medina was completed. The daily detection capacity reaches to **10,000 sample**.

On June 1, the Governor of Medina visited this Huo-Yan Air Lab.

Application case: R o de Janeiro, Fortaleza, Brazil



Positive feedback

After a visit at BGI laboratories, Dr. Maram, the program manager at Ministry of Health, said **“BGI Lab is the best lab that I’ve seen in my life”** .



Over
4,000,000
Samples had been tested in Saudi



Canada, Saudi Arabia, Malaysia, the Philippines, Serbia, Panama, Buchanan, Colombia, Ethiopia, South Africa, Brunei, Argentina, Benin, Peru, Japan

中华人民共和驻沙特阿拉伯大使馆... 陈伟庆大使出席华大基因与沙特特约签约仪式...

中华人民共和国驻哥伦比亚共和国大使馆... 中国向哥伦比亚捐赠一批新冠病毒检测试剂盒...

中华人民共和国驻日本国大使馆... 驻日本使馆发言人就中方向日方捐助新型冠状病毒核酸检测试剂盒答记者问...

中华人民共和国驻秘鲁大使馆... 中国向秘鲁卫生部捐赠一批新冠病毒检测试剂盒...

中华人民共和国驻塞尔维亚共和国大使馆... 习近平同塞尔维亚总统武契奇通话...

中华人民共和国驻菲律宾共和国大使馆... 守望相助，共抗疫情，中国向菲律宾捐赠首批2000个检测试剂盒运抵马尼拉...

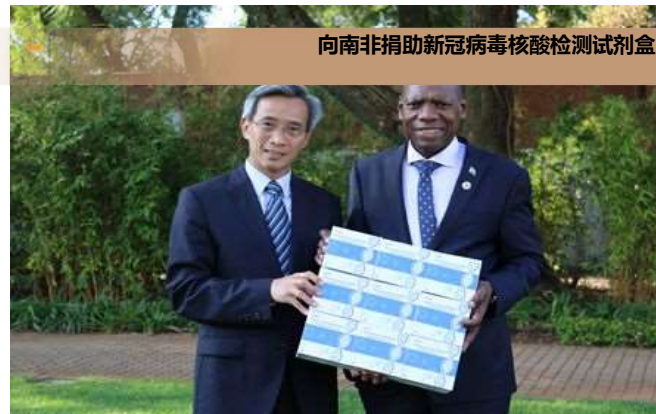
中华人民共和国驻安哥拉共和国大使馆... 中国向安哥拉捐赠一批新冠病毒检测试剂盒...

驻阿根廷使馆向阿卫生部转交首批捐赠的新冠病毒快速检测试剂盒... 3月20日，由中国驻阿根廷使馆和中国深圳市猛犸公益基金会向阿根廷政府捐赠的首批1500个由华大基因(BGI)研制的新型冠状病毒核酸快速检测试剂盒已转交阿根廷卫生部...

Social Responsibility

Beginning with the donation of COVID-19 test kits to Japan on February 20, BGI has successively donated SARS-CoV-2 detection kits to Japan, Peru, Angola, the Philippines, Serbia, Lebanon, Benin, Argentina, Uganda, South Africa, Ethiopia, Tunisia, Malaysia, Panama, Trinidad and Tobago, Albania, Colombia, Egypt, Latvia, and Burki.

In addition, BGI allied with other companies to donate the Huo-Yan Air laboratory or its core equipment to Serbia, Italy, Canada, France, Greece and other countries.





Thank You

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