

# HONG SENG'S HSBio GOES BIG-TIME INTO HEALTHCARE

HS Bio Sdn Bhd ("HS Bio"), a wholly-owned subsidiary of Hong Seng Consolidated Berhad ("Hong Seng" or "Group") has recently announced its intention to acquire a 51% stake in RZAC Immunesafe Sdn Bhd ("RZAC"). This reinforces the Group's commitment for continuous growth as a serious healthcare force for good in the ongoing fight against the COVID-19 pandemic.

According to a report by Fitch Solutions Macro Research, the Malaysian healthcare market is expected to grow by 127% to RM127.9bil by 2027 from RM56.3 billion in 2017, fueled by increasing demand for healthcare services from an ageing population, rising affluence, and increasing life expectancy.

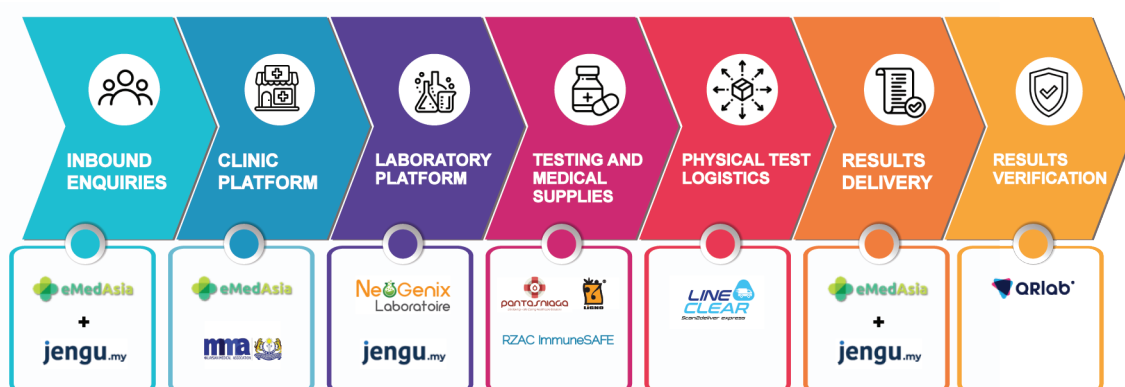
With this proposed acquisition, HS Bio will further expand its dominance in the lucrative healthcare

industry with the inclusion of RZAC's neutralising antibody testing capabilities to the considerable service verticals under Hong Seng.

RZAC has the exclusive rights to the distribution of ImmuSAFE™ COVID+, the world's first comprehensive lab-based biochip neutralising antibody test for COVID-19 and has secured orders and commitments from a multitude of government agencies and private companies, including vaccine producers.

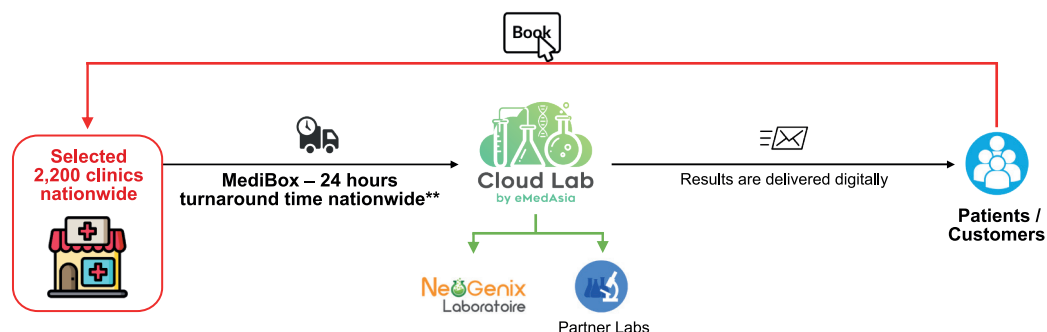
Therefore, HS Bio has expressed interest in RZAC as this is believed to be the next generation of the COVID fight synergistic with the Group's subsidiary, Neogenix Laboratoire Sdn. Bhd ("Neogenix Lab") and its capabilities in molecular diagnostic tests, oncological tests, Research & Development and precision medicine.

## HSBio LAUNCHES HEALTHCHAIN, A COMPREHENSIVE AND FULLY INTEGRATED ECOSYSTEM TO CAPTURE THE ENTIRE COVID-19 VALUE CHAIN



HS Bio Group of companies and its related partners

## CLOUD LAB – CONNECTING NATIONWIDE CLINICS TO LAB SERVICES



## A COMPLETE ECOSYSTEM FOR COVID-19 SERVICES

With the proposed 51% acquisition of RZAC, Hong Seng has completed the final piece of the puzzle in the completion of HealthChain, a comprehensive and fully integrated ecosystem able to process the entire value chain for Covid-19 testing. HS Bio is involved in the entire supply chain of the Covid-19 testing process, from front-facing and back-end process of its digital healthcare platform, medical laboratory and research & development services, as well as the medical & healthcare supplies.

This puts Hong Seng in a good position as the involvement in the entire supply chain of the Covid-19 testing process enables the Group to have access and visibility of the development, whether it is on the demand for testing, the capacity at the laboratory, inventory of the testing kit or the logistic issues involving the delivery of sample tests. The holistic approach of HealthChain and integrated nature of HS Bio's Covid-19 testing supply chain enables effective coordination and communication that allows the Group to increase its testing capabilities in anticipation of the scaling up of Covid-19 testing.

Currently, HS Bio is the only integrated supply chain healthcare provider that has an entire ecosystem for Covid-19 services. This could help to enable an effective national Covid-19 testing strategy for Malaysia. The digital healthcare platform such as Jengu and eMedAsia ensures easy and seamless access to any COVID tests and other health tests.

End users or the public can easily book and make payments for the tests via its digital healthcare platform.

Upon a booking made via these platforms, the back-end process will tap on the e-commerce marketplace under eMedAsia, that has a collaboration with over 2,200 clinics nationwide. The booking process will be effortless given the efficient back-end system that enables appointment data to be made with the nearest clinics. The bio-samples collected will be delivered to the nearest labs within 24 hours through the MediBox service provided by the Group's logistic partner and specialist, Line Clear Express Logistics Sdn Bhd.

"Once the test results are available, Jengu will work together with eMedAsia to facilitate the delivery of the test results to end-users via its in-house QR Code verification technology, QRLab, acknowledged by and affiliated with Affinidi and GovTech Singapore.

"This strategy is one with significant upside to shareholders, benefiting from a breadth of high growth opportunities in a traditionally defensive industry. Given that Covid-19 testing will remain as a key component for the reopening of the community, economy, businesses and international borders, the acquisition of RZAC will likely be earnings accretive for Hong Seng. Unlike some more cyclical industries which can suffer from oversupply, the Group is well-positioned for this fast-changing marketplace where this pandemic may evolve into an endemic."

## ImmuSAFE™ COVID +, THE RECOMMENDED COMPREHENSIVE ANTIBODY TEST BY IMR TO TEST THE EFFECTIVENESS OF YOUR VACCINATION

ImmuSAFE™ COVID+ Biochip comprehensive neutralising antibody assay tests as recommended by Malaysia's Institute for Medical Research ("IMR") is a test that assesses a person's level of neutralising antibodies. These neutralising antibodies are essential in generating an effective protective immunity, for which only the presence of neutralising antibodies is an indication that the body is capable of preventing the virus from entering its cells.

The detection of neutralising antibodies and the quantity on whether it meets a certain threshold is the only recommended and comprehensive neutralising antibody testing.

Most commercial antibody tests are not robust enough and can only provide positive results, which indicate an immune response has occurred. A simple result of "Yes" or "No" to an occurrence of immune response is not sufficient to evaluate immunity or protection from the SARS-CoV-2 infection.

Meanwhile, ImmuSAFE™ COVID+ biochip detects the actual neutralising antibody levels (both qualitative and quantitative). It is the world's first lab-based biochip test for COVID-19 that enables highly quantitative determination of both the level and target location of SARS-CoV-2 antibodies in an individual.

## THE KEY ADVANTAGES OF ImmuSAFE™ COVID+

1. ImmuSAFE™ is the world's first multi-antigen, epitope specific, fully quantitative test kit.
2. ImmuSAFE™ test has an accuracy of 100% as validated by IMR.
3. ImmuSAFE™ test can identify and measure the presence of neutralising antibodies with high accuracy and is able to quantify the levels of antibodies.
4. ImmuSAFE™ test can also determine which epitopes the neutralising antibodies bind to.
5. ImmuSAFE™ test has a sensitivity of 100% compared with single-antigen antibody tests.
6. ImmuSAFE™ test is able to quantify the value of the antibodies presence providing complete detail of the person's or the community's vaccine efficacy as compared to other rapid antibody tests which provide only a polar qualitative answer such as a "Yes" or "No" that which does not mean anything essentially.

Recommended and validated by the IMR, the ImmuSAFE™ COVID+ Biochip Test Kit is authorised by Medical Device Authority (MDA 600-3/1/12-46-11)

For more information or list of available clinics for ImmuSAFE™ COVID+ Biochip Test booking, please contact

WhatsApp : 012-923 0781  
Email : sales@aster.my  
Website : <http://rzacimmunesafe.my>



Hong Seng Consolidated Berhad  
(Stock Code : 0041)

[www.hongseng.com.my](http://www.hongseng.com.my)



HS Bio Sdn Bhd (Formerly Known As HS Bio Supplies Sdn Bhd)  
is a wholly-owned subsidiary of Hong Seng Consolidated Berhad

[www.hsbio.my](http://www.hsbio.my)



# HSbio LAUNCHES HEALTHCHAIN

## AN INTEGRATED COVID-19 TESTING SUPPLY CHAIN WHICH SUPPORTS A RETURN TO THE NEW NORMAL

Hong Seng Consolidated Berhad's ("Hong Seng") healthcare arm and wholly-owned subsidiary, HS Bio Sdn Bhd ("HS Bio") has launched HealthChain, a comprehensive end-to-end medical supply chain management solution. It will empower the nation to access an effective COVID-19 testing strategy that will accelerate a return to the 'new normal' of business and operating practices in Malaysia. HS

Bio is actively involved in managing the entire end-to-end supply chain of COVID-19 testing processes. This encompasses everything from the front-facing and back-end processes, physical logistics, digital healthcare platform, laboratory facilities and research & development ("R&D") services, as well as the provision of medical & healthcare supplies.

The holistic approach of HealthChain and integrated nature of HS Bio's COVID-19 testing supply chain enable effective coordination and communication that allow HS Bio to leverage industry tailwinds for nationwide Covid-19 testing in a quick and agile manner. As a result HS Bio is uniquely well-positioned to reap the rewards accruing to a truly one-stop shop operator facilitating Covid-19 testing in Malaysia.

Furthermore, Hong Seng's ongoing acquisition of a 51% stake in RZAC Immunesafe Sdn Bhd ("RZAC") enables the Group to have the exclusive distribution rights of the ImmuSAFE™ COVID+ Biochip, a comprehensive neutralising antibody testing kit that has an accuracy of 100% as validated by the Institute for Medical Research ("IMR").

With the proposed acquisition, the Group will also benefit from the synergy between usage of the ImmuSAFE™ neutralising antibody testing kits and the capabilities of its laboratory testing division, Neogenix Laboratoire ("Neogenix Lab"). This relationship will be further enhanced by the multitude of other synergistic services provided in the HealthChain supply chain such as its e-commerce platform and logistics solution. HealthChain will empower an effective COVID-19 testing strategy, which is vital for a return to normalcy in Malaysia. This is part of HS Bio's double bottom line philosophy, which is to do well by doing good.

Given HS Bio's experience in laboratory testing via Neogenix Lab as well as its collaboration with more than 2,200 clinics, through its eMedAsia platform, that are capable of performing COVID-19 tests using ImmuSAFE™ COVID+ Biochip and other COVID-19 test kits, the proposed acquisition of RZAC is not only a natural extension of HS Bio's medical supply chain capabilities but is also immediately value accretive from an earnings and service capability perspective. It will profoundly assist the group in ramping up its existing testing capacity whilst simultaneously building supporting infrastructure.

*HealthChain will help us to effectively scale up the nation's COVID-19 testing capacity as we have full access and visibility of the development, whether it is on-the-demand for testing, the capacity at the laboratory, the inventory of the testing kit or the logistic issues involving the delivery of sample tests. Our synergistic approach allows for the debottlenecking of critical path processes and effective demand/supply planning. This integrated and comprehensive approach to medical supply chain management enables the Group to build even greater efficiencies and scale through process simplification whilst also improving the service levels and turnaround time in the tracking, identification and management of COVID-19 positive cases and clusters.*



Hong Seng's Executive Director, Christopher Chan

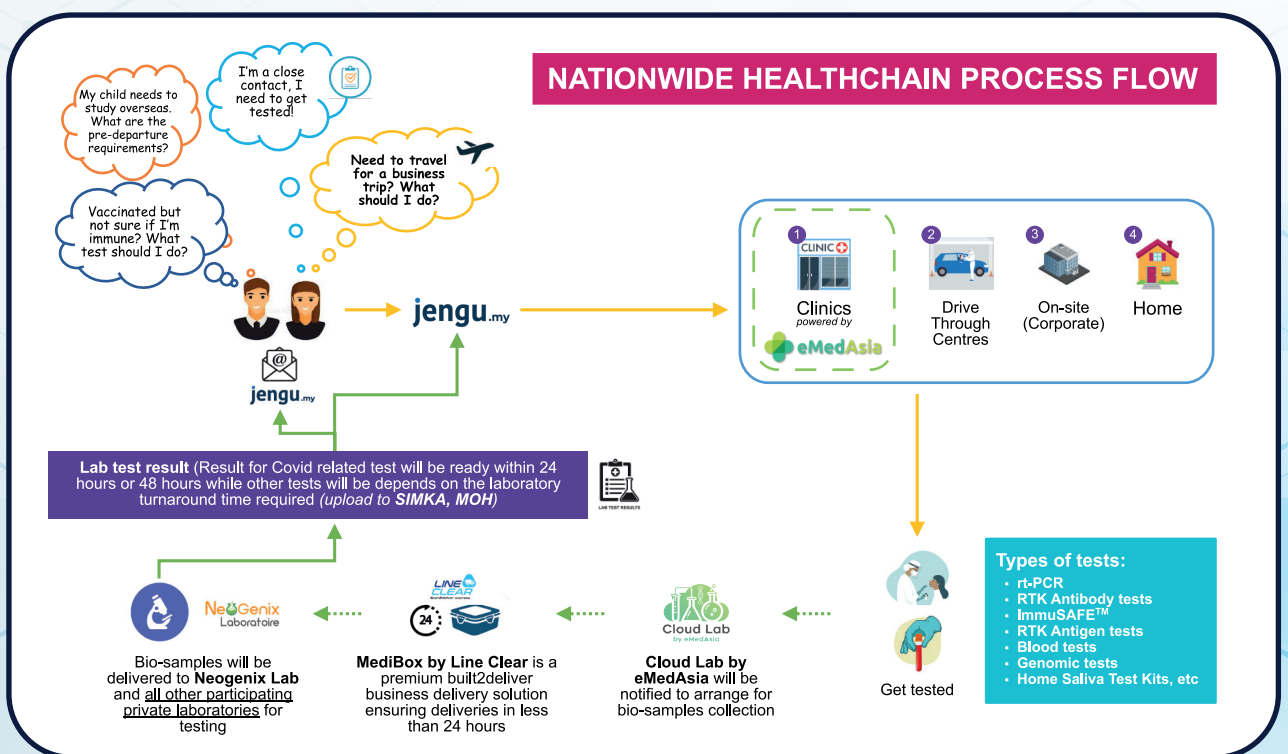
### SEAMLESS BOOKING FOR COVID-19 TESTING

In the age of hyper-convenient experiences, HS Bio is more relevant than ever, having partnered with Jengu (Jengu.my) to ensure seamless service delivery in the healthcare testing sphere. Jengu focuses on providing an end-to-end COVID-19 test booking framework, and has been instrumental in the operation of the Periodic Commuting Arrangement ("PCA") and Reciprocal Green Lane ("RGL") schemes enabling point of entry testing for travellers between Malaysia and Singapore.

Users are also able to request COVID-19 testing services directly through the Jengu platform via the website Jengu.my, for tests such as the polymerase chain reaction ("PCR") tests, Rapid Test Kit ("RTK") antigen tests and antibody tests. Users will also be able to book the ImmuSAFE™ neutralising antibody test in the near future, which is capable of detecting and quantifying the neutralising antibody level within an individual.

For users who are looking to book COVID-19 testing in order to travel to other countries, the Jengu platform will also be able to provide ease of scheduling for COVID-19 tests. As most destination countries have a different requirement, the Jengu platform is developing and rolling out a feature set which will ensure that the tests conducted will fulfil the requirement of the destination countries, such as the duration required for testing prior to the flight into the destination country. For example, those entering Singapore at the moment will be required to take a COVID-19 PCR test within 48 hours of their flight to Singapore.

### NATIONWIDE HEALTHCHAIN PROCESS FLOW



Once the booking is made via these platforms, the back-end process will tap on the e-commerce marketplace under eMedAsia Sdn Bhd, which has collaboration with over 2,200 clinics nationwide. The booking process is seamless given the efficient and proven back-end system that enables appointment data to be made with the nearest clinics. The bio-samples collected are delivered to the nearest labs within 24 hours through the MediBox service provided by the Group's logistics partner and specialist, Line Clear Express Logistics Sdn Bhd.

The lab test results for COVID-19 related tests will be ready within 24 hours or 48 hours, while other tests will depend on the required laboratory turnaround time. The test results will be uploaded to the Sistem Informasi Makmal Kesihatan Awam ("SIMKA") under the Ministry of Health while users will be notified on the test results digitally via email and Jengu. Participating labs can also choose to have their lab results enhanced by an additional layer of security via the provision of block-chain-enabled QR code attestation, made possible via HS Bio's partner company QRLab.



Hong Seng Consolidated Berhad  
(Stock Code : 0041)

[www.hongseng.com.my](http://www.hongseng.com.my)



HS Bio Sdn Bhd (Formerly Known As HS Bio Supplies Sdn Bhd)  
is a wholly-owned subsidiary of Hong Seng Consolidated Berhad

[www.hsbio.my](http://www.hsbio.my)