

THE COVIRIX MEDICAL PITCH

COVIRIX Medical Pty Ltd

DELIVERING INNOVATION

*Repurposed Inhaled Broad-Spectrum Therapies for Pulmonary
Diseases
(Respiratory Infections)*

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COVIRIX Medical your Partner with a purpose

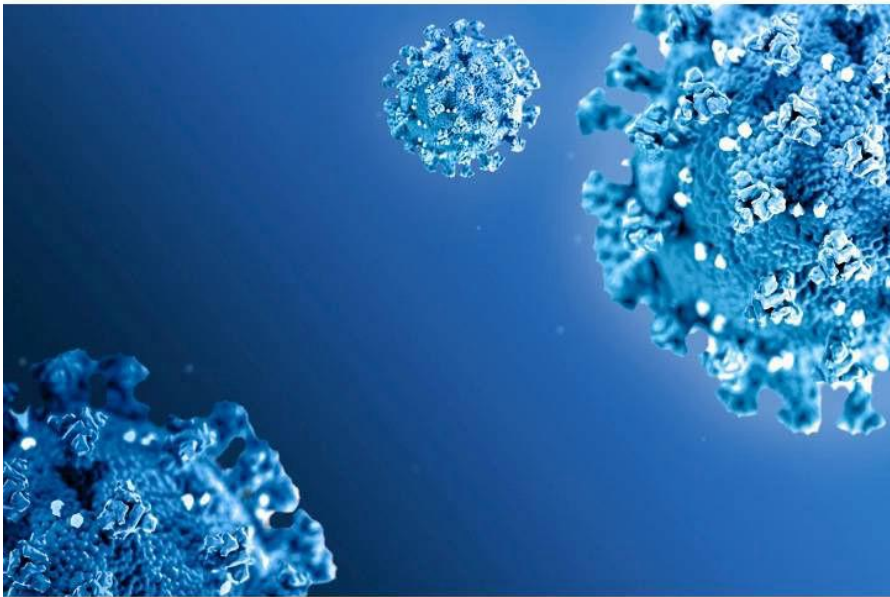


Image by rawpixel.com

- **Is the world prepared for the next respiratory disease pandemic? More importantly, is your country prepared for the next respiratory disease pandemic?**

COVIRIX Medical your Partner with a purpose

- repurposing an existing antiviral with anti-inflammatory property.
- demonstrated effectiveness against a number of SARS CoV-2 variants in extensive in-vitro studies.
- **unique mechanism of action and broad spectrum antiviral.**
- same patented antiviral treatment applicable to treating wide range of viral respiratory diseases: (all types of) influenza including Avian Flu, RSV, metapneumoviruses, seasonal coronaviruses, etc.



Range of capsule-based Monohaler dry powder devices

Purpose-driven founders & team



We are a team of renowned professionals with complementary expertise and decades of industry experience, collectively the best qualified team in Australia to deliver our stated mission. We are a team of professionals with complementary expertise and deep experience in healthcare, biotech, drug development, synthesis and testing, and investment banking.

Board of Directors:



Prof Kumud Dhital
Founder, CEO



Richard LI Founder,
Executive Director Head of
Corporate Development



Dr Ian Nixon Founder,
Executive Director Chief
Medical Officer

Purpose-driven founders & team

Senior Management:



Prof David Morton,
Consultant Aerosol
Scientist



Dr Simon Tucker, Chief
Virologist & Head of
Clinical Development



Prof Seb Marcuccio,
Founder, Medicinal &
Drug Discovery
Chemist

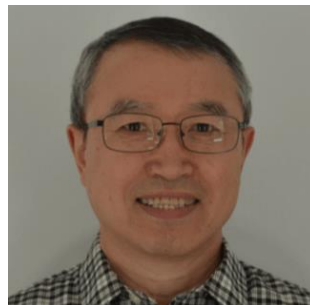


Eric Pong, Company
Secretary CFO

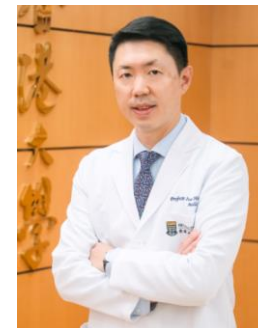
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COVID-19 Expert
Advisory Panel,
HKSAR

Deep understanding of the problem



Sole reliance on vaccination as a route to eliminate the current and future pandemics is evidently naïve.

Emergence of cross-variants from recombination of variants or the emergence of other viruses with pandemic potential such as influenza add little comfort and raise further concern.

The logical treatment strategy is an effective ***broad spectrum antiviral*** drug to kill viruses by blocking their reproduction

Our approach is to repurpose existing pharmaceutical drugs:

with proven antiviral efficacy against SARS-CoV-2 and many other viruses, with adjunctive anti-inflammatory properties, and

proprietary delivery via oral inhalation and intranasal inhalation routes as highly targeted treatment options against current ***and future*** pandemics together with seasonal diseases.

We're responding to COVID-19

We're preparing for future mutations of the virus

And readying for inevitable next respiratory virus pandemic.




Range of capsule-based Monohaler dry powder devices

Breakthrough patented technology and novel solutions



- a 20 years Australian patent for repurposed antiviral for treatment and prevention of pulmonary and respiratory infections.
- IP is patent pending in US, EU, China, and Japan.
- **designed to be administered by oral inhalation** to provide a targeted treatment solution for COVID-19,
- offers faster onset of action, reduced side effects compared to systemic (oral) drugs. [Covirix announcement 8 March 2022.pdf](#)


Australian Government
IP Australia

CERTIFICATE OF GRANT
STANDARD PATENT

Patent number: 2021332085

The Commissioner of Patents has granted the above patent on 23 March 2023, and certifies that the below particulars have been registered in the Register of Patents.

Name and address of patentee(s):
COVIRIX Medical Pty Ltd of Level 1, 237 East Boundary Road Bentleigh East VIC 3185 Australia

Title of invention:
Glucosidase inhibitors for the treatment and prevention of pulmonary infections

Name of inventor(s):
MARCUCCIO, Sebastian Mario; MORTON, David Alexander Vodden and TUCKER, Simon Peter

Term of Patent:
Twenty years from 25 August 2021

Priority details:

Number	Date	Filed with
2020903051	26 August 2020	AU


COMMONWEALTH OF AUSTRALIA
AUSTRALIA
PATENT OFFICE

Dated this 23rd day of March 2023
Commissioner of Patents

PATENTS ACT 1990
The Australian Patents Register is the official record and should be referred to for the full details pertaining to this IP Right.

A compelling market opportunity

- rising tide of vaccine resistant strains,
- vaccine hesitancy,
- large parts of the third world unvaccinated,
- unknown but limited duration of antibody protection.
- infective waves or surges for multiple reasons:
 - immune escape from emerging new variants, Omicron the most ubiquitous form.
- best approach: develop an effective **broad spectrum antiviral** to treat COVID-positive individuals, regardless of their symptomatic status
- would dramatically limit the spread of infection and allow global societies to return to normality in a shorter period.
- learnings from the COVID pandemic can be applied to future outbreaks of coronavirus and other viruses **using the same COVIRIX therapy.**



Gaining Traction

completed successfully virology studies in Australia, The US, and the Netherlands.

These studies demonstrated by the mechanism of action effectiveness of the portfolio of our drug candidates against a range of SARS CoV-2 variants.

COVIRIX is seeking direct to government pre-purchase orders, scaling up production by partnering with pharmaceutical manufacturers particularly those with proprietary inhalation devices and are involved in API production.



Range of capsule-based Monohaler dry powder devices

COVIRIX Medical: Impacting the world



- **COVIRIX Medical and South African Numolux Group have entered into a strategic partnership (Appendix 3) that will focus on establishing an inhaled antiviral drug development platform by repurposing, starting with South Africa for the African continent, then extending to the entire BRICS Plus Alliance for treatment of diseases, starting with viral respiratory diseases using COVIRIX Medical's portfolio of antiviral drug candidates with oral and intranasal inhalational delivery routes.**
- **The parties will co-operate with each other in the areas of pre-clinical and clinical research, registration, marketing, and distribution of antiviral products in South African and other African markets.**
- **The Numolux Group launched the BRICS Health and Pharmaceutical Association of Africa in May 2023.**
- **COVIRIX Medical is the first Australian pharmaceutical company to position itself in the BRICS Plus Alliance, leveraging on the strong business relationships of the Numolux Group within South Africa, a key member of the BRICS Plus Alliance, and the leadership of South Africa within the African continent, a market with a population of over 1.4 billion people.**

MEDIA RELEASE



FORMATION OF A PRIVATE SECTOR BRICS HEALTH AND PHARMACEUTICAL ASSOCIATION CAN PLAY HUGE ROLE IN MAKING QUALITY HEALTHCARE ACCESSIBLE TO AFRICA

For Immediate Release

22 August 2023

On Thursday, 17 August 2023, the Numolux Group held an event to commemorate the culmination of their series of Health Seminars titled: BRICS and Africa: African Solutions to Africa's Health Challenges.

The purpose of these seminars was to bring together stakeholders, namely businesses, governments, academics, civil society and interested individuals and institutions, to focus on health challenges faced by the people of BRICS and African Countries and find solutions to said challenges.

Findings from these seminars, which focused on malaria, non – communicable diseases (oncology and diabetes), regulatory harmonisation and mental health and wellness – clearly emphasised that there is a need for:

- greater collaboration between the private and public sectors to improve the quality of health and promote wellness,
- the harmonisation of the regulatory authorities within the SADC, the African continent and BRICS countries,
- BRICS investment in the pharmaceutical and medical equipment space, from research and development through to manufacturing,
- these products are to be made available to the continent of Africa.

There is a need for greater collaboration between regulatory authorities within SADC, Africa, and the BRICS to facilitate ease of trade and to increase access to affordable medicines, pharmaceuticals and vaccines, preferably manufactured locally.

Dr Owen KALUWA, WHO Representative for South Africa, was present at the event and cited challenges in global healthcare as follows:

- Around 30% of the global population cannot access essential health services (2019).
- Almost 2 billion people face catastrophic or impoverishing health spending, with significant inequalities affecting those most vulnerable (2017).
- Many other health-related SDG targets are also, of course:
- An estimated 5 million under-5 children died in 2021.
- Global MMR is 223 maternal deaths per 100 000 live births (2020), against the SDG global target of 70.
- Globally we are off course for SDG targets on infectious and non-communicable diseases.

With all of the above in mind, Col (Ret) Hilton Klein, Chairperson of the Numolux Group fiercely advocated for the formal formation of a private sector BRICS Health and Pharmaceutical Association. He said: "As the private sector, we can no longer stand by as Africa and her people get the short end of the stick in healthcare. Within our space of BRICS and African countries, we can work alongside governments and produce life-saving medicines, vaccines and medical-related products – which are easily accessible and more affordable to the most underserved populations of the globe.

Member of SA BRICS Business Council, Stavros Nicolaou, spoke at the Numolux event and echoed Col. Klein's sentiment, saying Africa needs financial support to strengthen the health infrastructure and be able to procure medicines and vaccines to help fight against pandemics which hit the continent. Nicolaou insisted that "Africa should be given an equal opportunity to equality of resources, pharmaceutical interventions, medicines, and vaccines."

The Deputy Minister of Health, Dr Sibongiseni Dhlomo, emphasised that South Africa is committed to building a partnership between BRICS and Africa in a bid to unlock mutually beneficial opportunities for increased trade, investment, and infrastructure development.

One positive event, which could lead to creating jobs at a crucial time in South Africa's economy, was the announcement of a new partnership between COVIRIX Medical from Melbourne, Australia and the Numolux Group.

Prof Kumud Dhital, CEO of COVIRIX Medical, was present at the event and said he was excited about their new venture with Numolux: "COVIRIX Medical is delighted to announce a partnership with the South African Numolux Group towards further developing and introducing our repurposed, and now patented inhalational antiviral therapy to the African continent and ultimately to the BRICS + Alliance, and beyond. Extensive pre-clinical studies demonstrate effectiveness against several SARS-CoV-2 variants. In addition, due to its unique mechanism of action, we believe that it will provide broad-spectrum effectiveness against a wide range of viral respiratory diseases."

"I believe that the power of this partnership will go well beyond this immediate remit and that it will provide a sustainable platform to accelerate the development of additional therapies for other diseases, whenever possible, through our repurposing strategy that significantly shortens the standard timeline of product discovery to prescription.

We are confident that this strategic global relationship between our Australian company and the Numolux Group will eventually permit us to jointly deliver a wider portfolio of healthcare solutions beyond therapeutic and prophylactic pharmaceuticals, including diagnostic solutions."

Richard Li, Executive Director and Head of Corporate Development at COVIRIX Medical, added: "We are proud to be the first Australian pharmaceutical company to have partnered with the dynamic Numolux Group of South Africa to leverage on the business and investment opportunities available from the African continent and the BRICS Alliance."

For more information on the outcomes of the Series of International Health Seminars (Malaria, Non –Communicable Diseases, Regulatory Harmonisation and Mental Health and Wellness)

Appendix 2 Media Release: 12.3.2025 Successful virology study for 4 respiratory viruses



Media Release, Melbourne

12 March 2025

COVIRIX reports successful test results on diverse influenza viruses, including seasonal flu and avian flu viruses, and RSV, building upon previous successful tests on SARS CoV-2 and multiple variants.

COVIRIX Medical, a Melbourne based pharmaceutical development company, announces today that the company has recently completed virology tests at a renowned USA university laboratory, which specializes in viral research and virology studies, affirming the antiviral activity of our antiviral drug compound against all representative human influenza A viruses (seasonal flu viruses including H5N1 Avian Flu virus) together with human respiratory syncytial virus (RSV).

Notably, these tests were performed using human airway epithelial tissues designed to closely replicate the real human respiratory tract. In this regards, it is important to note that COVIRIX Medical's patented antiviral drug is designed to be administered in Dry Powder form by oral inhalation directly to the respiratory tract. Oral Inhalation is designed to provide rapid delivery of the drug at high local concentrations to the site of respiratory virus replication: the respiratory tract. This latest virology test data support our view that our proprietary targeted dry powder inhaled approach should circumvent the potential systemic side effects of this drug class resulting from other modes of delivery. A reduction of more than 10 fold in dose, compared to systemic oral delivery is anticipated from the latest data.

The COVIRIX Medical antiviral can also be administered as a preventive against potential respiratory infections which will deliver substantially more value in disease prevention and accordingly reduce the burden on the healthcare system.

The data results from the virology tests just completed provide independent confirmation of our earlier assays conducted at Australian, USA, and Netherlands based laboratories involving the respiratory virus SARS CoV-2 and its multiple variants, confirming the broad spectrum activity.

COVIRIX Medical's compounds belong to a class of drugs that have a long, well-established history of broad spectrum antiviral activity (i.e. activity across many different species of viruses), and therefore are likely to work against known and emerging strains of respiratory viruses, including pandemic potential viruses. The class also includes several approved drugs that have been in use for many years for non-infectious diseases applications.

COVIRIX Medical's lead molecule CVX 20733, already a clinically approved drug, is a repurposed drug currently in use as an orally delivered drug for metabolic diseases which the company intends to deliver via a proprietary inhaled dose form.

The virology study just completed tested another molecule in the COVIRIX Medical portfolio, CVX 20700, which is significantly more potent than CVX 20733 and is planned to be released as a pipeline product in the future subject to successful appropriate clinical trials.

At a time when the world is immersed in an avian flu pandemic which has already infected birds, poultry, mammals and humans in all continents of the world, the successful virology test results just received by COVIRIX Medical are of significant importance to the company but they also offer to the

global healthcare system a credible and valuable antiviral treatment solution when it may well be critically needed in the very near future.

Armed with these successful test results, COVIRIX Medical will be seeking partnerships with renowned medical research institutes and major pharmaceutical companies to fast track the commercialization of its patented antiviral portfolio.

Many lessons learned from the recent Covid-19 Pandemic, including that of the subsequent problem of Covid vaccine hesitancy, will likely serve to support the speedier introduction of COVIRIX Medical's antiviral treatment solution against respiratory diseases.

For enquiry, please email to Contact@covirix.com or refer to [Home \(covirix.com\)](http://Home(covirix.com))

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