



## PRESS RELEASE

**5 APRIL 2023 | FOR IMMEDIATE RELEASE**

### **Tuberculosis patients see dramatic cut in treatment duration, treatment effectiveness remains**

*Singapore, 5 April 2023* – Tuberculosis (TB) patients can look forward to a much-shortened treatment period, compared to the current six-month treatment regimen used globally. In a ground-breaking study conducted across Asia and Uganda, Africa, the research team from the Yong Loo Lin School of Medicine, National University of Singapore (NUS Medicine), National University Hospital (NUH) and Singapore Clinical Research Institute (SCRI), led by Professor Nicholas Paton from the Department of Medicine and Infectious Diseases Translational Research Programme (NUS Medicine), found that a TB treatment strategy with an initial 8-week treatment period followed by retreatment of a small minority who were not cured, showed the same efficacy level as the standard 6-month treatment, but halved the average total time on treatment.

The TRUNCATE-TB trial recruited 675 people who were diagnosed with pulmonary TB and randomly allocated them to receive the standard treatment for six months or to receive the TRUNCATE strategy which involves initial treatment with an intensive two-month (8-week) antibiotic regimen, with the possibility of extension if needed, followed by close monitoring and early retreatment for those who were not cured. The team tested the strategy with four different initial 8-week drug combinations using a new type of trial design to identify whether any of the treatment combinations were doing less well and needed to be discontinued early. Participants in the trial were each followed up for 2 years to see how many patients were still on treatment for TB or had active TB at that time.

In the final analysis, two of the strategy groups were compared against the standard treatment group. One of these strategy groups – in which people were given an initial 8-week treatment combination containing bedaquiline<sup>1</sup> and linezolid with three standard tuberculosis drugs (isoniazid, pyrazinamide and ethambutol) – was found to be as good as the standard treatment in clinical outcome at 2 years. But, in this strategy group the average total time on treatment was 85 days, compared to 180 days for standard treatment group.

Professor Nicholas Paton said, “This trial shows that it is possible to move away from the standard six-month, one-treatment-duration-for-all approach which is long and may not be needed for everyone. Instead, we can treat most people with a two-to-three-month intensified treatment, provided that they remain in clinical care for monitoring after the end of treatment so that the minority who are not completely cured and require longer treatment can be detected and re-treated. This trial has the potential to transform the way people think about treating tuberculosis, and the way that clinical trials are done. With further work to refine the

---

<sup>1</sup> Bedaquiline is FDA-registered (since Dec 2012) for multi-drug resistant TB and is currently not registered in Singapore.

strategy, this new, more individualised approach to treatment will likely replace the standard six-month fixed duration approach for all.”

TB is caused by a *Mycobacterium tuberculosis* bacterial infection that affects the lungs, which multiplies and destroy the tissues in the body. As an infectious disease, TB germs can be transmitted through the air when a TB patient coughs, sneezes, speaks or sings and remain in the environment for a few hours at a time. The standard for TB treatment globally has been a six-month regimen based around the antibiotic rifampicin (called “rifampin” in the United States).

The TRUNCATE-TB trial was designed and coordinated from Singapore across a network of 18 sites in Indonesia, Philippines, Thailand, India and Uganda, Africa. This multi-site trial was supported by SCRI, which provided support in patient randomisation, data management, pharmacovigilance, and statistical analysis.

The TRUNCATE-TB trial is supported by the National Research Foundation, Singapore, under its Translational and Clinical Research Flagship Programme (NMRC/TCR/011-NUHS/2014), and administered by the Singapore Ministry of Health’s National Medical Research Council. It is also funded by the United Kingdom’s Medical Research Council and the Department for International Development, as well as Wellcome Trust.

The findings are published in the [New England Journal of Medicine](#).

For media enquiries:

Amanda YAP  
Assistant Manager, Communications  
Yong Loo Lin School of Medicine  
National University of Singapore  
Tel: +65 8157 0881  
Email: [medajy@nus.edu.sg](mailto:medajy@nus.edu.sg)

### **About National University of Singapore (NUS)**

The National University of Singapore (NUS) is Singapore’s flagship university, which offers a global approach to education, research and entrepreneurship, with a focus on Asian perspectives and expertise. We have 16 colleges, faculties and schools across three campuses in Singapore, with more than 40,000 students from 100 countries enriching our vibrant and diverse campus community. We have also established our NUS Overseas Colleges programme in more than 15 cities around the world.

Our multidisciplinary and real-world approach to education, research and entrepreneurship enables us to work closely with industry, governments and academia to address crucial and complex issues relevant to Asia and the world. Researchers in our faculties, research centres of excellence, corporate labs and more than 30 university-level research institutes focus on themes that include energy; environmental and urban sustainability; treatment and prevention of diseases; active ageing; advanced materials; risk management and resilience of financial systems; Asian studies; and Smart Nation capabilities such as artificial intelligence, data science, operations research and cybersecurity.

For more information on NUS, please visit <https://nus.edu.sg>.

## **About the NUS Yong Loo Lin School of Medicine (NUS Medicine)**

The NUS Yong Loo Lin School of Medicine is Singapore's first and largest medical school. Our enduring mission centres on nurturing highly competent, values-driven and inspired healthcare professionals to transform the practice of medicine and improve health around the world.

Through a dynamic and future-oriented five-year curriculum that is inter-disciplinary and inter-professional in nature, our students undergo a holistic learning experience that exposes them to multiple facets of healthcare and prepares them to become visionary leaders and compassionate doctors and nurses of tomorrow. Since the School's founding in 1905, more than 12,000 graduates have passed through our doors.

In our pursuit of health for all, our strategic research programmes focus on innovative, cutting-edge biomedical research with collaborators around the world to deliver high impact solutions to benefit human lives.

The School is the oldest institution of higher learning in the National University of Singapore and a founding institutional member of the National University Health System. It is one of the leading medical schools in Asia and ranks among the best in the world (Times Higher Education World University Rankings 2023 by subject and the Quacquarelli Symonds (QS) World University Rankings by subject 2022).

For more information about NUS Medicine, please visit <https://medicine.nus.edu.sg/>.

## **About the National University Hospital**

The National University Hospital (NUH) is Singapore's first university hospital. While the hospital at Kent Ridge first received its patients on 24 June 1985, our legacy started from 1905, the date of the founding of what is today the NUS Yong Loo Lin School of Medicine. NUH is the principal teaching hospital of the medical school.

Our unique identity as a university hospital is a key attraction for healthcare professionals who aspire to do more than practise tertiary medical care. We offer an environment where research and teaching are an integral part of medicine, and continue to shape medicine and transform care for the community we care for.

We are an academic medical centre with over 1,200-beds, serving more than one million patients a year with over 50 medical, surgical and dental specialities. NUH is the only public and not-for-profit hospital in Singapore to provide trusted care for adults, women and children under one roof, including the only paediatric kidney and liver transplant programme in the country.

The NUH is a key member of the National University Health System (NUHS), one of three public healthcare clusters in Singapore.

Visit our website at [www.nuh.com.sg/](http://www.nuh.com.sg/).

## **About the Singapore Clinical Research Institute (SCRI)**

Established in 2008, the Singapore Clinical Research Institute (SCRI) was set up as the national academic clinical research organisation to enhance the standards of clinical research

in Singapore by developing core capabilities, infrastructure and scientific leadership for clinical research. In 2021, SCRI was appointed as the national coordinating body to implement the national clinical trial strategy and enhance Singapore's clinical trial ecosystem.

This is accomplished through the deployment of innovative technologies and processes, and strategic coordination of ecosystem capabilities and infrastructure to achieve synergies that will enhance the clinical research ecosystem aimed towards a healthier community and better patient outcomes.

The key pillars include: (1) Clinical Research Operations; (2) Clinical Trials Infrastructure Coordination; (3) Clinical Research Networks; (4) Academic Research Partnerships; and (5) SCRI Academy.

SCRI supports clinical trials and research in the domains of haematology and oncology, infectious diseases, ophthalmology, neuroscience, and cardiovascular diseases.

SCRI is a business unit under the [Consortium for Clinical Research and Innovation, Singapore \(CRIS\)](#), a subsidiary of Ministry of Health Holdings. SCRI is supported by the Singapore Ministry of Health's National Medical Research Council.

For more information, visit <https://www.scri.edu.sg>.