

ViREMics Viral Research and Experimental

Medicine Centre

MOLECULAR SOLUTIONS TO **ACCELERATE VACCINE AND** THERAPEUTIC DEVELOPMENT



ViREMiCS was established in 2017. It is a core unit under the SingHealth Duke-NUS Academic Medical Centre. Specialising in acute infectious diseases, such as dengue and Covid-19, ViREMiCS aims to augment clinical development of therapeutics and vaccines through the application of molecular endpoints of safety and immunogenicity.

OUR EXPERTISE



1. ISO-ACCREDITED ASSAYS

We provide ISO 15189-accredited assays to assess outcomes of early phase clinical trials.

2. GUIDED SCREENING OF VACCINE/THERAPEUTIC CANDIDATES







3. TRANSLATIONAL RESEARCH SOLUTIONS

We support bench to bedside translation of infectious disease therapeutics and vaccines in a timely and affordable manner

OUR ACHIEVEMENTS

COMBINED 50 YEARS OF EXPERIENCE IN TRANSLATIONAL RESEARCH IN VIRAL DISEASES

ISO 15189 ACCREDITATION

- 4 COMPLETED EARLY-STAGE CLINICAL TRIALS & 5 IN PROGRESS
 - 6 INVESTIGATOR INITIATED CLINICAL TRIALS

OVER 5000 SAMPLES PROCESSED

OVER 50 PUBLICATIONS

OUR SERVICES

1. GENE EXPRESSION MEASUREMENTS



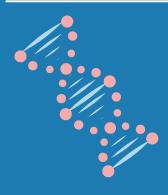
Analysis of gene expression to:

- Derive molecular biomarkers to demonstrate safety and efficacy in clinical trials.
- Analyse host response to vaccination or therapeutic intervention.
- Assess pathway enrichment of gene expression changes.

2. PATHOGEN DETECTION BY QRT-PCR

Pathogen detection for precise assessment of viraemia levels following therapeutic intervention and vaccination.





3. WHOLE GENOME SEQUENCING

Whole viral genome sequencing aids in analysis of potential escape mutants following therapeutic intervention or vaccination.

NOTABLE CLINICAL TRIALS

NCT04480957 - ARCTURUS THERAPEUTICS

Ascending Dose Study of Investigational SARS-CoV-2 Vaccine ARCT-021 in Healthy Adult Subjects.

NCT04429529 - TYCHAN PTE LTD

Safety of TY027, a Treatment for COVID-19, in Adults.

NCT03746015 - TAKEDA VACCINES

Immunogenicity and Safety of Tetravalent Dengue Vaccine Candidate (TDV) in Flavivirus-Naive and Dengue-Immune Adults.

NCT03776786 - TYCHAN PTE LTD

Safety and Tolerability of an Antibody Against Yellow Fever Virus (TY014) in Adults.

NCT04728347 - ARCTURUS THERAPEUTICS

Open Label Extension Study to Assess the Safety and Long-Term Immunogenicity of ARCT-021.

NCT01943305 - INVESTIGATOR INITIATED TRIAL

The Role of Pre-existing Cross-reactive Antibodies in Determining the Efficacy of Vaccination in Adults.

NCT04267809 - INVESTIGATOR INITIATED TRIAL

Modulating Cellular Stress in the Immune Cells to Reduce Rate of Symptomatic Viral Infection.