



PRESS RELEASE

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A*STAR & CYTOS BIOTECHNOLOGY ESTABLISH INFLUENZA VACCINE COLLABORATION

Multi-agency project could establish independent supply of influenza vaccine for ASEAN and extends Cytos' R&D pipeline

1. Switzerland's Cytos Biotechnology and Singapore's Agency for Science, Technology and Research (A*STAR) jointly announced today their first collaboration on a virus-like particle (VLP) vaccine. This partnership, which involves academic and clinical partners across Singapore¹, aims at research, development and commercialisation of a VLP vaccine² to manage influenza infections. This collaboration could potentially secure an independent supply of vaccines for Singapore and other ASEAN countries to protect against seasonal influenza and future pandemics and extends Cytos' R&D pipeline.

2. Under this agreement, Cytos Biotechnology will work with A*STAR's Experimental Therapeutics Centre (ETC) and Singapore Immunology Network (SIgN) to develop and produce a VLP based vaccine targeting the influenza hemagglutinin protein. The vaccine candidate will then be further evaluated in pre-clinical safety and efficacy studies by DSO National Laboratories (DSO). Duke-NUS Graduate Medical School Singapore and the Singapore Clinical Research Institute will then conduct a proof-of-concept study to evaluate the safety of the vaccine and its capacity to induce virus-neutralising antibodies (HI titers). Thereafter, Cytos will hold the worldwide, sub-licensable rights to further develop, manufacture and commercialise the vaccine while A*STAR subsidiaries will be entitled to produce the vaccine for Singapore and other ASEAN countries. A*STAR subsidiaries can earn a

¹ The academic and clinical partners include the DSO National Laboratories, Duke-NUS Graduate Medical School, and the Singapore Clinical Research Institute (SCRI)

² Information about virus-like particle (VLP) vaccines is at the [Annex](#).

royalty on worldwide net sales from influenza vaccine products developed under the terms of this agreement.

3. Prof Sir George Radda, Chairman of A*STAR's Biomedical Research Council which funds part of the research, commented, "We are extremely excited at the progress and scale of this collaboration. It is thanks to the suite of capabilities in Singapore from basic to translational research, and to the technological know-how at Cytos, that such a product can be brought from discovery to clinical delivery, to provide rapid and cost-effective protection against pandemics. We look forward to forging more such powerful partnerships with industry and healthcare organisations to meet public health needs and benefit society."

4. Dr Martin Bachmann, Chief Scientific Officer of Cytos, said, "Through access to Singapore's centres of scientific and drug development excellence, we have the opportunity to gain clinical proof-of-concept for one of Cytos' VLP vaccines in the prophylactic setting. The influenza vaccine collaboration is the first of its kind for Cytos and offers us the chance to, on the one hand, support Singapore and other member states of ASEAN in becoming more self-sufficient with provision of vaccines relevant to their emerging issues in public health, and, on the other hand, contribute a valuable product candidate to extend Cytos' existing pipeline."

5. "The collaboration with the Duke-NUS Graduate Medical School and the Experimental Therapeutics Centre to better understand the nature of influenza pandemic and its spread in the community will greatly enhance our ability to prevent and strengthen our defence against such pandemic threats. We are pleased to be a partner in this collaboration," said Mr Quek Gim Pew, Chief Executive Officer of DSO.

6. "We believe that the investment Singapore has made in biomedical research can be translated into a "made in Singapore" influenza vaccine, which could be particularly important in mitigating health risks exacerbated by influenza pandemics," said Associate Professor Ooi Eng Eong, the project's lead investigator and a virologist at Duke-NUS Graduate Medical School Singapore.

7. Prof Sam Lim, SCRI's Chief Operating Officer said, "We are very excited to have the opportunity to collaborate across so many different organizations leading to one of the first phase 1 vaccine studies in Singapore. Singaporeans and others in the ASEAN region will greatly benefit from this highly innovative clinical research."

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About the Agency for Science, Technology and Research (A*STAR)

A*STAR is the lead agency for fostering world-class scientific research and talent for a vibrant knowledge-based and innovation-driven Singapore. A*STAR oversees 14 biomedical sciences, and physical sciences and engineering research institutes, and seven consortia & centres, which are located in Biopolis and Fusionopolis, as well as their immediate vicinity.

A*STAR supports Singapore's key economic clusters by providing intellectual, human and industrial capital to its partners in industry. It also supports extramural research in the universities, hospitals, research centres, and with other local and international partners.

For more information on A*STAR, please visit www.a-star.edu.sg.

About the Experimental Therapeutics Centre (ETC)

ETC was set up in 2006 to play an increasingly important role in translating early-stage scientific discoveries into practical applications. From engaging in early stage drug discovery and development to developing innovative research tools for clinical analysis, as well as setting up public-private partnerships to facilitate the advancement of drug candidates, ETC augments Singapore's capabilities and resources in the drug discovery process. ETC's capabilities and resources are currently focused on oncology and infectious diseases. It also incubates new technologies for commercialisation and mentors young scientists for careers in the pharmaceutical and biotech industry.

For more information about ETC, please visit www.etc.a-star.edu.sg.

About the Singapore Immunology Network (SIgN)

The Singapore Immunology Network (SIgN), officially inaugurated on 15 January 2008, is a research consortium under the Agency for Science, Technology and Research (A*STAR)'s Biomedical Research Council. The mandate of SIgN is to advance human immunology research and participate in international efforts to combat major health problems. Since its launch, SIgN has grown rapidly and currently includes 150 scientists from 25 different countries of the world working under 20 renowned principal investigators. At SIgN, researchers investigate immunity during infections and inflammatory conditions including cancer and are supported by cutting edge technological research platforms and core services. Through this, SIgN aims to build a strong platform in basic human immunology research for better translation of research findings into clinical applications. SIgN also sets out to establish productive links with local and international institutions, and encourage the exchange of ideas and expertise between academic, industrial and clinical partners and thus contribute to a vibrant research environment in Singapore.

For more information about SIgN, please visit www.sign.a-star.edu.sg.

About Cytos Biotechnology

Cytos Biotechnology Ltd is a public Swiss biotechnology company that specializes in the discovery, development and commercialization of a new class of biopharmaceutical products – the Immunodrugs™. Immunodrugs™ are intended for use in the treatment and prevention of common chronic diseases, which afflict millions of people worldwide. Immunodrugs™ are designed to instruct the patient's immune system to produce desired therapeutic antibody or T cell responses that modulate chronic disease processes. Taking advantage of the high flexibility of its Immunodrug™ platform, Cytos Biotechnology has built a diversified pipeline of Immunodrug™ candidates in various disease areas, of which six are currently in clinical development. The Immunodrug™ candidates are developed both in-house and together with Novartis, Pfizer and Pfizer Animal Health. Founded in 1995 as a spin-off from the Swiss Federal Institute of Technology (ETH) in Zurich, the Company is located in Schlieren (Zurich). Currently, the Company has 76 full-time employees. Cytos Biotechnology Ltd is listed on the SIX Swiss Exchange (SIX:CYTN).

For more information on Cytos Biotechnology, please visit www.cytos.com.

About DSO National Laboratories

DSO National Laboratories (or DSO in short) is Singapore's national defence research and development organisation.

It undertakes indigenous development of advanced defence and weapon systems that provide the Singapore Armed Forces (SAF) with the superior technological edge in the battlefield. While its primary focus is to support the SAF, DSO also extends its defence R&D capabilities to support homeland security.

With more than 1000 research scientists and engineers, DSO researches into emerging technologies, matures promising ones and integrates them into innovative system concepts to meet Singapore's defence and security needs.

For more information about DSO, please visit www.dso.org.sg

About Duke-NUS Graduate Medical School Singapore

www.duke-nus.edu.sg

The Duke-NUS Graduate Medical School Singapore (Duke-NUS) was established in 2005 as a strategic collaboration between the Duke University School of Medicine, located in N. Carolina, USA and the National University of Singapore (NUS). Duke-NUS offers a graduate entry, 4-year medical training programme based on the unique Duke model of education, with one year dedicated to independent study and research projects of a basic science or clinical nature. The first class of students started term on 1 August 2007. As a player in Singapore's biomedical community, Duke-NUS has identified five Signature Research Programmes: Cancer & Stem Cell Biology, Neuroscience and Behavioural Disorders, Emerging Infectious Diseases, Cardiovascular & Metabolic Disorders, and Health Services and Systems Research.

About the Singapore Clinical Research Institute

The Singapore Clinical Research Institute (SCRI) is an organization with the strategic imperative to enhance the standards of human clinical research through driving the development of core capabilities, infrastructure, intellectual and scientific leadership in Singapore. Its vision is to develop SCRI and Singapore scientists as an ASEAN hub for clinical research excellence.

SCRI strives to improve patient care through the design and conduct of high quality, cutting edge clinical research. SCRI collaborates and supports academic, public-sector and industry-sponsored studies ranging from proof-of-concept to late phase and epidemiological studies.

The SCRI houses an experienced and highly-qualified team of scientists and research staff, offering a comprehensive suite of clinical research capabilities. These areas of expertise range from clinical project development and execution, including protocol/study design, project management and, site monitoring, data management/biostatistical analysis, epidemiology and evidence synthesis and training on various aspects of clinical research.

In driving towards its vision, SCRI continues to enhance Singapore's clinical research capabilities and strengthen its expertise in executing single and multisite, multinational research and the development of regional clinical research networks.

This foregoing press release may contain forward-looking statements that include words or phrases such as "could", "aims", "potentially", "will", "opportunity", "can", "provide", "gain", "offers", "support", "leading" or other similar expressions. These forward-looking statements are subject to a variety of significant uncertainties, including scientific, business, economic and financial factors, and therefore actual results may differ significantly from those presented. There can be no assurance that any further therapeutic entities will enter clinical trials, that clinical trial results will be predictive for future results, that therapeutic entities will be the subject of filings for regulatory approval, that any drug candidates will receive marketing approval from the U.S. Food and Drug Administration or equivalent regulatory authorities, or that drugs will be marketed successfully. Against the background of these uncertainties readers should not rely on forward-looking statements. The parties assume no responsibility to update forward-looking statements or adapt them to future events or developments. This document does not constitute an offer or invitation to subscribe or purchase any securities of Cytos Biotechnology Ltd.

Information on virus-like particle (VLP) vaccines

VLPs mimic the external protein structure of a virus, yet are incapable of causing infections themselves as they do not contain the genetic material (DNA or RNA) that is necessary for viral replication in host cells. The human immune system responds to a VLP vaccine as it would to the live virus, allowing the body to build immune defenses to fight the infection.

Attenuated, or weakened, forms of the infectious virus have traditionally been used for antiviral vaccines. This type of vaccine has been effective in preventing many types of diseases, but is typically difficult to produce and may have limited applications in treating certain populations.

Recombinant technologies, particularly the E.coli fermentation used for the VLP based influenza vaccine, may allow the rapid and large-scale production of vaccines. Taken together, this should increase access for people living in low- and moderate-income countries where an influenza pandemic may likely originate, potentially saving millions of lives during an influenza pandemic.

VLP vaccines have already been developed and approved to prevent human Hepatitis B and papillomavirus infections.