

Press Release

For media only Issued on 13 July 2023

Singapore

GSK invests S\$343 million in state-ofthe-art vaccines facility expansion at Tuas Singapore

GSK celebrates the groundbreaking ceremony of the facility expansion that will produce drug substances for GSK's leading vaccines that prevent Hepatitis B

GSK today celebrated the groundbreaking of its S\$343 million state-of-the-art vaccines facility at Tuas which will manufacture drug substances for GSK's vaccines that protect against Hepatitis B. This expansion of the existing GSK facility at Tuas will start construction in the third quarter of 2023, with completion targeted by 2025. The site will commence commercial production in 2027. Mr. Gan Kim Yong, Minister for Trade and Industry, Singapore, was the guest of honour at the groundbreaking ceremony.

"The growing manufacturing footprint of global biopharmaceutical players in Singapore is testament to the long-term prospects of the sector. GSK's latest investment is a strong show of confidence in Singapore's world-class infrastructure and skilled workforce for biopharmaceutical manufacturing. In addition to efforts in developing manufacturing leaders in Singapore, GSK has also been a steadfast partner to our research ecosystem. With its focus on advanced manufacturing and sustainability, the expanded GSK Tuas facility will provide exciting opportunities for our local talent and institutes to shape the future of vaccine production," said Ms. Jacqueline Poh, Managing Director, Singapore Economic Development Board.

Speaking at the event, Regis Simard, President, Global Supply Chain of GSK, said "GSK's additional investment in Tuas underlines the company's commitment to investing in Singapore, reinforcing its strong presence in the country for over 60 years. GSK has robust medicines and vaccines operations and a considerable manufacturing footprint in the country, housing three manufacturing sites in Jurong, Quality Road and Tuas. The expanded facility will solidify the positive contribution that GSK Tuas makes to global public health, helping us achieve our purpose to unite science, technology and talent to get ahead of disease together."

The GSK Tuas site, opened in 2009, is the first vaccines manufacturing plant in Singapore. The site's Hepatitis B facility expansion will produce and supply worldwide drug substances for GSK's Hepatitis B vaccines. According to the World Health Organisation (WHO), Hepatitis B resulted in an estimated 820,000 deaths globally in 2019, with 1.5 million new infections each year.¹ By 2030, WHO aims to reduce the number of new Hepatitis B infections by 90%, with vaccination being at the core of its strategy.¹



This facility expansion will add about 100 jobs in fields that include production, quality assurance, quality control, Manufacturing Science and Technology (MSAT), technical services, learning and development as well as operational excellence. Advanced technology will be deployed at the site, like process analytical technology (PAT) and process digital twins that will innovate how we control the manufacturing process to ensure consistent product quality and output.

To accelerate achieving GSK's ambition of Carbon Net Zero by 2030, the facility expansion has, among other sustainability features, renewable energy generation, process improvements, and energy-efficient Heating Ventilation and Air Conditioning (HVAC) systems. The new facility is designed to have a total annual energy savings of about 800 Megawatt-hour that equals reduction of an estimated 300 tons of carbon dioxide emission. This is equivalent to powering about 200 four-room Housing Development Board (HDB) flats for one year.²

The facility expansion reinforces the GSK Tuas site as an important part of GSK's manufacturing footprint in Singapore. It will produce drug substances for Hepatitis B vaccines in addition to the site's current production of drug substances for GSK's polysaccharide conjugate vaccines and Hib (*Haemophilus influenzae type b*) vaccines. These vaccines protect against invasive diseases such as pneumonia and meningitis.

Siong Wan Chan, Site Director, Tuas Singapore, Global Supply Chain of GSK, said "Over the years, our dedicated and passionate GSK Tuas people have been producing vaccines that protect many people against infectious diseases. This facility expansion investment will allow the GSK Tuas site to positively impact the health of even more people around the world, united by our shared purpose to get ahead of disease together."

About Hepatitis B

Hepatitis B is a potentially life-threatening liver infection caused by the hepatitis B virus (HBV). It is a major global health problem. It can cause chronic infection and puts people at high risk of death from cirrhosis and liver cancer. Hepatitis B infection is a vaccine-preventable disease. Preventing hepatitis B infection averts the development of complications including chronic disease and liver cancer.

The World Health Organisation (WHO) estimates that 296 million people were living with chronic hepatitis B infection in 2019, with 1.5 million new infections each year.¹

In 2019, hepatitis B resulted in an estimated 820 000 deaths, mostly from liver cirrhosis and hepatocellular carcinoma (primary liver cancer).¹ For more information, please see <u>here</u>.

About GSK's Hepatitis B vaccine

GSK's Hepatitis B vaccine is the first recombinant DNA Hepatitis B vaccine to be licensed.^{3,4} In more than 35 years,^{3,4} over one billion doses⁵ have been distributed across more than 90 countries.⁵

About GSK Tuas

With an investment of S\$510 million, our state-of-the-art vaccines manufacturing facility at Tuas was opened in June 2009 by Singapore's Prime Minister Lee Hsien Loong, coinciding with our 50th anniversary in Singapore. Comprising two production buildings, an administration block, quality control laboratories, utility plant and warehousing, the facility became operational in 2011. The facility and



operations meet the high quality and good manufacturing standards of global regulatory bodies such as the European Medicines Agency and the United States Food and Drug Administration.

Tuas is a key manufacturing site within our network supplying the active ingredient used to make our pneumococcal conjugate vaccine. This paediatric vaccine is indicated for the active immunisation against pneumonia, invasive diseases and acute otitis media caused by *Streptococcus pneumoniae* in infants and children.

Tuas site also focuses on manufacturing Hib (*Haemophilus influenzae type b*) antigen which is used in the manufacture of several paediatric vaccines. Hib is a bacterium responsible for invasive diseases, such as severe pneumonia and meningitis, contracted almost exclusively by children less than five years old.

These two vaccine products manufactured at Tuas cover a number of diseases causing paediatric mortality in the world, making a significant contribution to our global health agenda. The site continues to invest in developing technical capability and process improvement, and embracing new technology such as digital, data and analytics to position itself as a centre of excellence for the manufacture of vaccines.

About GSK in Singapore

GSK was the first global healthcare company to establish a presence in Singapore in 1959. For over 60 years, GSK has been an important contributor to the healthcare system and the biopharma manufacturing sector in Singapore. GSK is one of the biggest contributors to Singapore's biomedical sciences industry with investments of more than S\$2.5 billion.

Singapore is the headquarters for our Global General Medicines (GM) business and is also the regional headquarters for our Greater China and Intercontinental (GCI) and Emerging Markets (EM) regions. It houses 3 vital manufacturing sites, comprising two medicines manufacturing sites and a vaccines manufacturing facility. Today GSK employs over 1,500 people in Singapore, every one of whom share our mission to get ahead of disease together. For more information, please visit <u>Singapore | GSK</u>

About GSK

GSK is a global biopharma company with the ambition and purpose to unite science, technology and talent to get ahead of disease together. For further information, please visit <u>www.gsk.com</u>.

References

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Event remarks by Siong Wan Chan, Site Director, Tuas Singapore, Global Supply Chain, GSK at the official groundbreaking ceremony of GSK's vaccines facility expansion in Tuas Singapore 13 July 2023

Our guest of honour, Mr. Gan Kim Yong, Minister for Trade & Industry, Deputy British High Commissioner to Singapore, Mr. Alex Bamford, distinguished guests, members of the media, esteemed partners, friends and colleagues, good morning, and a very warm welcome to everyone present today. Thank you for coming here to join us as we cross another milestone for GSK's vaccines manufacturing facility here in Tuas, Singapore.

Today, we celebrate the groundbreaking ceremony for the new expansion that will produce drug substances for global supply of GSK's vaccines that protect against Hepatitis B. GSK Tuas has come a long way since it was officially declared open by Prime Minister Lee Hsien Loong in 2009, the year that also marked the 50th anniversary of GSK in Singapore. It is a matter of great pride for me personally to be a part of this journey.

The site is a state-of-the-art facility that has been manufacturing drug substances for our global supply of pneumococcal conjugate vaccines, *Haemophilus influenzae type b* vaccines and soon, the Hepatitis B vaccines. This facility expansion will add about 100 jobs in fields that include production, quality assurance, quality control, Manufacturing Science and Technology (MSAT), technical services, learning and development, as well as operational excellence. We are deploying advanced technologies like process analytical technology (PAT) and process digital twins to ensure consistent product quality and yield. Automated and paperless operations will improve the productivity of our workforce significantly and transform the way we produce vaccines.

To achieve GSK's ambition of Carbon Net Zero by 2030, the facility expansion has, among other sustainability features, renewable energy generation, process improvements, and energy-efficient Heating Ventilation and Air Conditioning (HVAC) systems. The new facility is designed to have a total annual energy savings of about 800 MWh that equals the reduction of an estimated 300 tons of carbon dioxide emission. This is equivalent to powering about 200 four-room Housing Development Board (HDB) flats for one year.

Over the years, our dedicated and passionate GSK Tuas people have been producing vaccines that protect many people against infectious diseases. This facility expansion investment will allow the GSK Tuas site to positively impact the health of even more people around the world, united by our shared purpose to get ahead of disease together.

Thank you.





Siong Wan Chan Site Director, Tuas Singapore, Global Supply Chain, GSK

Siong Wan Chan was appointed Site Director, Tuas Singapore, GSK Global Supply Chain from 18 February 2022 to lead GSK's first vaccines manufacturing facility in Asia. Siong Wan joined GSK in 2008 and has held various roles in Production, Quality and External Manufacturing. He started his career in GSK Tuas as a Production Supervisor, responsible for the commissioning, qualification, and start-up of commercial production.

Prior to his appointment as Site Director, he was based in Wavre, Belgium for a three-year development assignment from April 2019. He was initially responsible for managing a contract manufacturer for formulation, fill and finish operations. As the Covid-19 pandemic struck, he was subsequently appointed the Global Quality Partner for AS03 (GSK's proprietary adjuvant system), representing GSK with external partners, Sanofi, Medicago Inc. and SK Bioscience for the development of Covid-19 vaccines.

Prior to his career in GSK, Siong Wan worked in Maryland, USA for (then) Human Genome Sciences, Inc, which was acquired by GSK in 2012. He has also worked in a Singapore-based company in process development for mammalian cell culture.

Siong Wan has a Bachelor and Master of Science degree in Chemical Engineering from the National University of Singapore.

He is married and has two wonderful daughters. During his free time, he enjoys exercising such as running, travelling, and reading about astronomy.



Event remarks by Regis Simard, President, Global Supply Chain, GSK at the official groundbreaking ceremony of GSK's vaccines facility expansion in Tuas Singapore 13 July 2023

Event remarks Regis Simard

Dear Minister, dear guests and colleagues,

I am delighted to be here with you for this groundbreaking ceremony.

Today we celebrate a great example of how at GSK, we get ahead of disease together.

The Tuas site is part of our global supply chain of 37 GSK manufacturing sites in the world.

GSK is committed to investing in Singapore. We have a strong presence here for over 60 years with three manufacturing sites – two medicines sites in Jurong and Quality Road and one here in Tuas, which is our vaccines manufacturing facility.

Many of you may not know that GSK was the first global healthcare company to establish a presence in Singapore in... 1959.

And 60 years on, I am proud to say that we are one of the biggest players in Singapore's bioscience industry with total investments of more than S\$2.5 billion since we established our presence here.

GSK also helped to create high value jobs in Singapore. We help to develop local talent through scholarships, apprenticeship/training and leadership development programmes. We now employ over 1,500 people in Singapore and when this expansion in Tuas is completed in 2026, we will add another 100 jobs.

The groundbreaking ceremony we celebrate today represents an investment of S\$343 million to expand the site's manufacturing capacity for vaccines to protect against Hepatitis B, an infection that still every year causes hundreds of thousands of deaths in the world.

The contribution that this site makes to health in the world is something to be extremely proud of.

Let's celebrate Tuas and the fantastic milestone achieved here. Thank you all for your hard work and for bringing to life the GSK's purpose to get ahead of disease together.

Thank you very much..





Regis Simard President, Global Supply Chain, GSK

Regis Simard is President, Global Supply Chain, GSK, appointed 1 September 2018. He is a member of the GSK Leadership Team.

Regis is responsible for the manufacturing and supply of GSK's medicines and vaccines, and leads an organisation of 28,000 employees. In addition, he leads Quality and Environment, Health, Safety & Sustainability (EHSS) at a corporate level.

Regis began his GSK career as Site Director, Notre Dame de Bondeville in 2005 and has extensive international experience spanning all aspects of supply chain leadership. As a Senior Vice President, he has led GSK's global and regional manufacturing and supply operations, achieving significant performance improvements in safety, quality and supply.

Before joining GSK, he held senior management positions in the electronic and tech industries (Sony, Konica-Minolta) and in the healthcare and medical devices industries (Tyco Healthcare), where he gained valuable experience working with Japan, UK and France.

Regis is a mechanical engineer and holds an MBA.

Regis is a member of the board for ViiV Healthcare.