

## Sanofi introduces 'Modulus', world's first modular manufacturing facility in Singapore

27 November 2024 | News

**Modulus leverages an 'industry first' modular concept that enables flexible manufacturing capabilities to produce next generation vaccines and biological medicines reducing production timelines; Modulus will be fully operational mid-2026**



Sanofi announced the inauguration of its state-of-the-art manufacturing facility, **Modulus**, in Singapore, on **27 Nov**, marking a significant milestone in its commitment to delivering innovative healthcare solutions globally. The inauguration was witnessed by Mr Ong Ye Kung, Singapore's Minister for Health.

This next-generation facility, located in Tuas Biomedical Park, is highly digitalised and low-carbon, representing a new era in sustainable biopharmaceutical manufacturing. Modulus leverages a 'industry first' modular concept that enables flexible manufacturing capabilities to produce next generation vaccines and biological medicines.

Modulus can be adapted to manufacture up to four vaccines or biopharmaceuticals simultaneously, and can be reconfigured in a matter of days to change over between preestablished technological platforms (live attenuated viral or recombinant protein vaccines, as well as biotechnology derived treatments such as enzymes or monoclonal antibodies), compared with several weeks or months in more conventional plants.

The Modulus building is capable of housing the equivalent of 34 standardised production modules, each equipped with interconnected and modular equipment to configure production lines rapidly according to the specific needs of the moment. Adaptable and scalable, the facility will be able to rapidly develop and produce life-saving therapies, while also enhancing pandemic preparedness.

Png Cheong Boon, Chairman, Singapore Economic Development Board "Sanofi's expansion in Singapore reinforces the capabilities of our advanced manufacturing ecosystem to support the growth, innovation and sustainability ambitions of leading biopharmaceutical players. Through its novel modular concept manufacturing facility, Sanofi will boost its ability to produce life-saving therapeutics and vaccines, and potentially for future pandemics."

Modulus represents a critical link between scientific discovery and delivering life-changing treatment and vaccines to patients. Investing in vaccines and biomedicines for immunology and rare diseases is part of Sanofi's commitment to providing patients

faster access to both existing and innovative products.

Brendan O'Callaghan, Executive Vice President, Manufacturing & Supply, Sanofi "Modulus brings to life Sanofi's commitment to science and innovation, from R&D to the factory floor. Leveraging cutting-edge technology, the latest in digital innovation and advanced data analytics, Modulus will help accelerate the delivery of life-changing treatments to address unmet medical needs.

The expanded operations aims to redefine healthcare delivery with flexibility and speed, enabling us to meet the changing needs of the pipeline across multiple modalities, as well as respond with urgency to future public health challenges – all while delivering on our Planet Care commitments towards Net Zero by 2045."

The launch of the Singapore Modulus site will generate approximately 200 new jobs in Singapore, spanning a diverse range of roles, including bioprocess engineers, automation specialists, data analysts, quality control experts, and specialists in artificial intelligence, machine learning, and bioinformatics. In addition, the new facility underscores Sanofi's commitment to sustainability, featuring green technologies such as solar panels, green electricity, and recycled materials.

**Group Picture (L-R):** Calvin Chung (Assistant Chief Executive Officer, Engineering & Operations Group, JTC); Png Cheong Boon (Chairman, Economic Development Board); Minh-di Tang (Ambassador of France to Singapore); Minister Ong Ye Kung (Minister for Health of Singapore); Brendan O'Callaghan (Executive Vice President, Manufacturing & Supply, Sanofi) and Liang Hong Koh (Singapore Modulus Site Head, Sanofi) at the official inauguration of the Sanofi Modulus facility, in Singapore.