

Australia-Korea joint development agreement for needle-free patch delivery of typhoid vaccine

29 August 2023 | News

This collaboration is set to revolutionise vaccine delivery



South Korea-based SK bioscience has entered into a collaboration agreement with Vaxxas, an Australian biotechnology company developing a unique vaccine patch platform technology, to develop a second-generation typhoid conjugate vaccine with support from Wellcome.

SK bioscience's SKYTyphoid vaccine will be reformulated so that it can be 'printed' onto the thousands of tiny microprojections covering the Vaxxas patch to be delivered directly to the abundant immune cells just under the skin surface. This reformulation aims to enhance access and broaden markets where traditional intramuscular delivery using needle and syringe has been employed.

Under the agreement, SK bioscience will supply the antigen utilized by its typhoid conjugate vaccine, SKYTyphoid that was jointly developed by SK bioscience and the International Vaccine Institute (IVI).

Vaxxas will be responsible for reformulating the SKYTyphoid antigen so that it can be applied to its proprietary high-density microarray patches (HD-MAPs), and then conduct preclinical studies, which if successful, will be followed by a Phase I human clinical trial. The project is expected to be completed within two years from initiation to reporting the data from the Phase I clinical trial.

The project is being supported by approximately AU\$5.4 million (GB£2.84 million \$3.67 million) in grant funding received from Wellcome.