

## DEAN Professor Qiang ZHOU

Press Release For immediate release

# New Antibiotic Drug Developed by HKU Chemistry Research Team Approved for Clinical Trials in Humans

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A new antibiotic drug developed by a research team led by Professor Xuechen LI from the Department of Chemistry at The University of Hong Kong (HKU) has recently gained approval from the authorities to undergo clinical trials in the Mainland.

The new drug, which has taken the research team ten years to develop and is named Kynomycin, received the 'Notice of Approval for Drug Clinical Trials' from the National Medical Products Administration of China to be tested in human subjects.

The new antibiotic drug targets complex skin and soft tissue infections (cSSTI) caused by bacteria. It is a new type of cyclic lipopeptide category 1 drug with a novel chemical structure. The patent is licensed to a pharmaceutical company in the Mainland by HKU's Technology Transfer Office through the University's wholly-owned subsidiary, Versitech Limited.

Skin and soft tissue infections are very common bacterial infectious diseases in clinical practice, often leading to emergency visits and hospitalisation. With the emergence of clinically resistant strains and the development of bacterial pathogens that are resistant to antibiotics, treatment options have become increasingly limited.

The development of this drug aims to improve the safety and efficacy of cyclic lipopeptide antibiotics and provide a new choice for clinical treatment. After obtaining approval for this clinical trial, the drug still needs to undergo

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Phase I, II, and III clinical trials and be evaluated and approved by the National Medical Products Administration before it can be produced and marketed.

The research of Professor Xuechen Li lies in the interface of synthetic chemistry, medicinal chemistry and biology, spanning from innovative synthetic method development to biological studies and drug discovery, with the ultimate aim to develop novel therapeutics.

Professor Li was honoured in May this year with the Contribution Award in Carbohydrate Chemistry by the Chinese Chemical Society (CCS), recognising his pioneering contributions in precision chemical synthesis, chemical biology, and the development of therapeutic glycoconjugates of glycoproteins and bacterial complex carbohydrates. He has also been awarded the 2023/24 Research Grants Council Senior Research Fellowship, which funds his continued research on the synthesis and application of chemically synthesised proteins.

#### **About Technology Transfer Office, HKU**

The Technology Transfer Office (TTO) manages the use of HKU's intellectual property assets by providing patenting, licensing and other commercialisation support to the University's researchers and inventors. Acting as the bridge linking HKU to society in the area of technology commercialisation, TTO helps industries and businesses to access HKU's powerhouse of knowledge, innovation and expertise through close collaboration. For more information, please visit the official TTO website at <a href="http://www.tto.hku.hk">http://www.tto.hku.hk</a>.

#### **About Versitech Limited**

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