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Singapore identifies new bacteria to better understand infections

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The 6 isolates found in the study came from skin and soft tissue infections, and one from the tube inserted after bile duct surgery



Singapore scientists have identified and named a new species of bacteria, Staphylococcus singaporensis sp.nov, named after Singapore. This newly described pathogen is part of the Staphylococcus aureus (S. aureus) complex. S. aureus is a common bacterial cause of infections. Infections range from skin and wound infections, surgical infections, to blood stream infections which may be fatal.

In a recent study published in the International Journal of Systematic and Evolutionary Microbiology, the research groups from the National University Hospital (NUH), National Centre for Infectious Diseases (NCID) and Singapore General Hospital (SGH) studied bacteria isolates which appeared related to S. aureus.

S. singaporensis is closely related to S. aureus and will be identified as S. aureus using routine diagnostic tests. Whole genome sequencing is currently required to make the identification. The spectrum of disease caused by S. singaporensis will need to be further studied.

Meanwhile, the scientists have made available the bacterial strains of the new species to the NUS Department of Microbiology and Immunology. All 6 isolates have also been deposited in international strain repositories. It is essential that future research encompasses clinical observation, as well as basic laboratory research. This will elucidate the basic biology of the new species, and establish the differences between S. singaporensis and S. aureus, as well as other staphylococcal species.