

# Varsity researchers achieve breakthrough

○ Team comprising experienced individuals, postgraduate and undergraduate students make breakthrough after eight-year study

**KUALA LUMPUR:** Researchers at the Universiti Kuala Lumpur Institute of Medical Science Technology (UniKL-MESTEC) have made a breakthrough in the discovery of a new antibiotic for the treatment of pneumonia, an acute respiratory infection that primarily affects the lungs.

When a healthy person breathes in, air goes into tiny sacs in the lungs called alveoli. However, when a person has pneumonia, the alveoli become clogged with pus and fluid, making breathing difficult and limiting oxygen intake.

Individuals with severe cases of Covid-19 may be at an increased risk of developing bacterial pneumonia.

Pneumonia is currently a leading cause of morbidity and mortality worldwide, escalating the need to find a cure.

Phomosidione, a new antibiotic discovered by researchers at UniKL-MESTEC, may be capable of inhibiting pneumonia-causing bacteria by killing bacterial cells through a unique mechanism that specifically targets the bacterial outer membranes.

The research team, which included

The antibiotic may be capable of inhibiting pneumonia-causing bacteria.



experienced researchers as well as undergraduate and postgraduate UniKL students, studied the antibiotic for eight years and research training often included hands-on experience with advanced laboratory techniques such as PCR (polymerase chain reaction), cell culture, microscopy and molecular biology methods.

The project was funded by the government, as well as Italian and German funding agencies. A full patent and eight international awards

were granted to the research team for discovering the new antibiotic.

The research team was also awarded a second Prototype Research Grant Scheme by Ministry of Higher Education to design a nanotechnology-based nebuliser system to deliver the antibiotic.

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