

## FOR IMMEDIATE RELEASE Tuesday, November 6, 2018

## Global health threat of antibiotic resistance can be reduced with rapid diagnosis and responsible use

Minor infections could kill millions of people globally if antibiotic resistance continues to spread at the current rate.

AusDiagnostics Managing Director Professor Keith Stanley says that the key to combating the spread of antibiotic resistance is rapid diagnosis, followed by responsible use of antibiotics.

"AusDiagnostics has released a new molecular testing kit for detection of antibiotic resistance in Gram positive bacteria in blood cultures," he explains.

"This allows hospitals to get advance warning of antibiotic resistant bacteria in a matter of hours without having to wait for bacteria to grow on petri dishes for one to two days."

Using its patented multiplexing technology AusDiagnostics can test for multiple pathogens and resistance genes at one time from a single sample. The latest kit tests for Gram positive bacteria and resistance genes including methicillin resistant staphylococcus aureus (MRSA) and vancomycin resistant enterococci.

The Gram positive kit complements the kit for detection of carbapenamase resistant genes in Gram negative bacteria. Here there are a lot more antibiotic resistant genes that could be involved, but using the multiplexing strategy the kit is able to cover the majority of resistance genes currently threatening hospitals.

A third kit tests for sexually transmitted bacteria and associated macrolide antibiotic resistance genes found in Mycoplasma genitalium and Neisseria gonorrhoeae.

These three kits cover the majority of superbugs currently threatening hospitals around the world. Instead of having to make an empiric therapeutic decision which can result in ineffective treatment and an increased risk of encouraging bacterial resistance, the clinician can arm themselves with information that directs them to the most effective treatment option.

In a recent development AusDiagnostics went a step further to develop a kit which tests for more than 90 per cent of the resistance genes that might preclude the use of a particular antibiotic. This gives the clinician a clearer guide to treatment from the results of the test. It is likely that this approach will become more common as molecular diagnostics become more advanced.

World Antibiotic Awareness Week runs from November 12 to 18, 2018.

## **About AusDiagnostics:**

AusDiagnostics registered as an Australian company in 2006 and now employs

around 50 staff across four countries. Its proprietary technology, "Multiplexed Tandem PCR", was patented in 2005 following a START grant from the Australian Government to Corbett Research PTY Ltd. MT-PCR allows multiplexing any number of gene targets and can detect minor pathogens even in the presence of a large abundance of other pathogens. This makes it very useful for dual or multiple infections.

## For further details, contact:

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