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ASIA EDITION

Alterity, UniQuest team up to reverse bacterial resistance to antibiotics

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Alterity has secured the worldwide exclusive right to patented technology to develop and commercialize therapies that re-sensitize bacteria to antibiotics



Alterity Therapeutics has announced it has been granted a licence by UniQuest, the commercialisation company of The University of Queensland (UQ) in Australia, to novel zinc ionophore technology to combat antimicrobial resistance in superbugs.

Under the licence, Alterity has secured the worldwide exclusive right to patented technology to develop and commercialise therapies that re-sensitise bacteria to antibiotics. The licensed technology combines Alterity's PBT2 and other zinc ionophores with commonly used antibiotics to treat infections caused by multidrug resistant bacteria. This is an opportunity for Alterity to further leverage its investment in PBT2.

PBT2, Alterity's most advanced zinc ionophore, breaks the resistance of many important superbugs to available antibiotics, and is covered for this use by patents until 2038. Importantly, PBT2 has previously completed long term preclinical safety studies and phase 2 clinical trial testing in other indications and has been shown to have a favourable safety profile in those trials.

Professor Mark Walker of The University of Queensland said: "The results from our paper demonstrate that by breaking the resistance of superbugs, PBT2 and other zinc ionophores have the potential to restore the efficacy of several widely available antibiotics."

The authors also noted that superbugs exposed to a combination of PBT2 and antibiotics had a very low propensity to develop further resistance, making the emergence of cross-resistance to the novel treatment unlikely. Thus, PBT2 may help address the issue of antimicrobial resistance without becoming part of the problem.

Geoffrey Kempler, Alterity's Chairman and CEO said: "Even without the effects Covid-19, antibiotic resistant pathogens kill more than 700,000 people each year and represent a major threat to global public health. The approach developed by our collaborators is novel and potentially revolutionary. Existing antibiotics are losing the battle against these infections and science is struggling to keep up as pathogens continually adapt. Because we can combine PBT2 with existing antibiotics,

many of which are generic, this approach has strong commercial value to Alterity."

PBT2 can break the resistance of the most important resistant pathogens designated by the WHO.

"The critical and urgent importance of this work is amplified in the current context of Covid-19, because secondary bacterial infections associated with viral pandemics are an important cause of mortality. The need for effective antimicrobial regimens is very high," added Mr Kempler.

In exchange for the grant of exclusive worldwide rights, once Alterity generates commercialization revenue, UniQuest is entitled to receive certain payments including milestone and royalty payments commensurate with academic licenses.

Alterity intends to direct new resources to the project with no impact on its lead commercialisation program for ATH434, which is advancing to Phase 2 in Multiple System Atrophy, a Parkinsonian disorder with no approved therapy.