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ASIA EDITION

Helperby Therapeutics develops sustainable solution for antibiotic resistance

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Antibiotic Resistance Breakers is a novel technology that rejuvenates existing antibiotics into long-term effective combination therapies

UK based pharma company, Helperby Therapeutics has developed Antibiotic Resistance Breakers (ARBs) as a solution to the present danger of antimicrobial resistance.

Doctors increasingly rely on last resort antibiotics such as carbapenems and colistin, but as harmful bacteria continue to mutate, this final line of resistance will eventually fail.

The World Health Organisation (WHO) has dedicated World Antibiotic Awareness Week (13-17 November 2017) to 'Handle Antibiotics With Care'.

Antibiotic Resistance Breakers is a novel technology that rejuvenates existing antibiotics into long-term effective combination therapies.

WHO has identified the immediate threat from 3 critical priority pathogens for which there is currently limited antibiotic protection that are CRE (Carbapenem-resistant Enterobacteriaceae), Pseudomonas aeruginosa(Carbapenem-resistant) and Acinetobacter (Carbapenem-resistant). Out of three, CRE is the most dangerous causing severe and often fatal infections such as septicaemia and pneumonia.

Also, CRE has spread from Asia into Europe and the US and is epidemic and doubles every two years.

Helperby's Antibiotic Resistance Breakers rejuvenate existing antibiotics, enabling them to puncture the tough cell wall of CRE and other evolving superbugs to allow existing last-resort antibiotics to effectively do their work.

The ARB rejuvenation process can be performed repeatedly on different combinations of existing antibiotics to outsmart resistance. They are novel, effective and transferable, potentially producing many variants of new antibiotic combination. One ARB can be applied to multiple different classes of antibiotics, reducing the size, time and resource in Phase 3 clinical trials normally required for new chemical entities.

Prof Anthony Coates, Chief Scientific Officer of Helperby Therapeutics said, “New classes of antibiotics are difficult to develop, and none have been marketed for over 30 years. It is therefore imperative we keep existing antibiotics working.”

“We are one of only 6 companies in the world that have new antibiotics in clinical development which are potentially effective against all three of WHO’s critical priority pathogens.”

Importantly, Helperby’s solution meets WHO's four innovation criteria for effective new antibiotic protection that are absence of cross-resistance to existing antibiotics, new chemical class, new target and new mechanism of action

Principal treatments currently in development include; Clinical trials, Urinary tract infections, Intra-abdominal infections, Skin infections and MRSA - Removal of nasal carriage of MRSA to prevent post-surgical staphylococcal infections.

Helperby’s Antibiotic Resistance Breakers are an imminent solution to all three of the critical priority pathogens as identified by the WHO. We are potentially just 3 – 5 years away from the market”, Professor Coates