



PRESS RELEASE

For immediate release

Antibiotic Research UK Welcomes Finding of New Antibiotic by American and European Researchers

York UK

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The publication of a scientific paper by a group of American and European researchers (<http://www.nature.com/nature/journal/vaop/ncurrent/full/nature14098.html#close>)

announcing the identification of a new antibiotic with the potential to treat MRSA is fantastic news says Professor Colin Garner, Chief Executive of Antibiotic Research UK (ANTRUK). We are desperately short of new antibiotics and the novel strategy used by the researchers could lead to the identification of many more novel antibiotics. The new antibiotic has been named teixobactin and was discovered in the soil of back garden at the home of one of the American researchers, Dr Ling using a new device called the iChip.

Teixobactin was particularly active against Gram-positive bacteria such as Staph. aureus, Bacillus anthracis and Clostridium difficile. It is early days in the development of teixobactin and it could be between 10-15 years before the drug might become available for use in the clinic. There are many steps between discovery of a new antibiotic and its eventual approval as a drug. Interestingly the researchers found it impossible to produce bacterial resistance against teixobactin in contrast to other antibiotics. The new antibiotic targets the cell wall of the sensitive bacteria and this might explain why it is not as effective against Gram-negative bacteria. Its mechanism of action is similar to another antibiotic in use today called vancomycin which is used as a last resort antibiotic because of its toxicity to the kidney. It remains to be seen if teixobactin demonstrates similar toxicity.

Whilst the finding of teixobactin is very exciting, there is a long way to go before knowing if it will be useful in the clinic. Also Gram-negative bacteria are a bigger problem from a public health perspective than Gram-positive bacteria since the frequency of infection is higher and the risk of antibiotic resistance greater.

Gram-negative bacteria are the focus of Antibiotic Research UK's future antibiotic development programmes. ANTRUK aims to raise funds to finance new scientific programmes with the aim of developing at least one new antibiotic therapy in the next 5-7 years. The charity's scientific and technical panel will identify five projects and ask the public to decide which project they wish to donate to. This novel method of fundraising provides a direct link between public donors and the projects they are supporting. The charity aims to raise up to £30 million, through a combination of traditional fundraising, corporate sponsorship, trusts and foundations as well as newer fundraising methods such as crowd funding.

ENDS

CONTACT DETAILS

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About ANTRUK (see attached)

and www.antibioticresearch.org.uk

Notes to Editors

About Antibiotic Research UK

Antibiotic Research UK is the world's first charity to tackle the problem of antibiotic resistant infection. We aim to develop one new antibiotic therapy by 2020 with further antibiotics being introduced over the next decade. **To reach our goals we need to raise £30 million over the next 5-7 years.** Antibiotic Research UK has the support of some of the United Kingdom's leading scientific and clinical experts in antibiotic resistance, drawn from 14 of the country's top universities and 12 specialty pharmaceutical or support companies¹.

The problem of antibiotic resistance (superbugs) has been highlighted by the World Health Organisation, the UK Prime Minister, the President of the USA, the UK Chief Medical Officer and Jim O'Neill, chair of the Government's Review of Antimicrobial Resistance. David Cameron talked about medicine going back to the 'dark ages' if we didn't tackle this impending health disaster. Antibiotic Research UK is a registered charity and is uniquely placed to develop new therapies which would be made available to all affected by antibiotic resistant infections throughout the world.

¹ Universities involved; Aston, Birmingham, Bristol, Cambridge, Kings College London, Leeds, Manchester, Newcastle, Nottingham, Oxford, Southampton, St Georges London, Strathclyde, Warwick, York. Companies involved; Chemical Biology Ventures, Euprotec, Evotech, Garner Consulting, John Innes Research Centre, Novacta Biosystems, P A Consulting, Pharmabioquintet, Redex Pharma, Sealife Pharma, Selcia, Transcrip Partners