

Statement 13 November 2015

## CYSTIC FIBROSIS TRUST ISSUES "LIFE OR DEATH" WARNING AROUND ANTIBIOTIC RESISTANCE

## As part of World Antibiotic Awareness Week, the Cystic Fibrosis Trust unveils the harrowing effect of antibiotic resistant bacteria for people living with cystic fibrosis

As part of World Antibiotic Awareness week Dr Keith Brownlee, Director of Impact at Cystic Fibrosis Trust humanises the current global antibiotic crisis and explains the significance for people living with cystic fibrosis:

"The significance of antibiotic resistance to people with cystic fibrosis is a matter of life and death. The thick mucus in lungs affected by cystic fibrosis harbour bugs that once caught, can remain in the lungs for years. For those where chronic or long term bacterial infections occur bacterial resistance to antibiotics makes treatment less effective. As bugs become resistant to standard antibiotics, doctors are forced to prescribe older and rarely used antibiotics which are less effective and have serious side effects. The effect, for people living with this condition, could be devastating."

The cystic fibrosis clinical community recognises that personalised antibiotic treatment is the key to reducing antimicrobial resistance globally. Clinicians and researchers, both in cystic fibrosis and beyond, must focus on diagnostic tools to ensure that patients are prescribed only those antibiotics that are necessary and will be most effective.

The Cystic Fibrosis Trust is fighting to combat this growing issue in two key ways; by funding alternatives to antibiotics and supporting the development of new antibiotics. Current funded work in this area includes;

- The Cystic Fibrosis Trust is funding grants to understand how multi-drug resistant superbug *Burkholderia cepacia* evades the natural defences of people with cystic fibrosis and is supporting work to develop a new kind of treatment for this bug. <u>The programme</u> is led by Professor Miguel Valvano and builds on pioneering work at the University of Western Ontario funded by CF Canada.
- The Cystic Fibrosis Trust is supporting studies into existing drugs, such as <u>Lynovex®</u> that can act against the bacteria in the sputum of people with cystic fibrosis, including the notoriously dangerous superbug *Mycobacterium abscessus* and exploring their use as novel antimicrobial treatments
- The Cystic Fibrosis Trust is supporting research testing new, non-antibiotic forms of therapy, and developing novel treatments to counteract adaptations of *Pseudomonas*. Led by Professor Jane Davies of Imperial College London, the <u>Strategic Research Centre (SRC)</u> seeks to address the three major challenges posed by *Pseudomonas aeruginosa*: better detection, better understanding and better treatment.
- The Cystic Fibrosis Trust is funding research Led by Professor Andres Floto at the University of Cambridge into the multidrug resistant nontuberculous mycobacterium (NTM). <u>This study</u> is looking into how this bacteria spreads, why some strains cause more damage than others and is looking to develop new drugs to treat the infection more effectively

Much of this research could have significant benefits to the wider population and is helping to tackle the big issues around antibiotic resistance. To support the work of The Cystic Fibrosis Trust please visit our website or to donate £5 to the Cystic Fibrosis Trust text BEATCF to 70500.

Visit <u>http://www.cysticfibrosis.org.uk</u> to learn more.

The Cystic Fibrosis Trust supports UK Antimicrobial Resistance strategy, Antibiotic Guardian, European Antibiotic Awareness Day (18 November) and World Antibiotic Awareness Week (16-22 November).