

Manchester team develops non-antibiotic drug against TB

12 September 2018 | News | By Manbeena Chawla

The team hopes that the compound developed after 10 years of painstaking research will be tried on humans within three to four years.



A group of scientists at the University of Manchester, UK has developed the first non-antibiotic drug to successfully treat tuberculosis in animals.

The team hopes that the compound developed after 10 years of painstaking research will be tried on humans within three to four years.

During the study, animals with acute and chronic TB infection were treated with the compound, which was discovered after investigating dozens of other derivatives and compounds thought to have similar properties.

The causal organism Mycobacterium Tuberculosis (Mtb) secretes molecules called Virulence Factors which block out the immune response to the infection, making it difficult to treat.

The team has identified one Virulence Factor called MtpB as a suitable target, which when blocked allows white blood cells to kill Mtb in a more efficient way.

The scientists plan to optimize the chemical compound further such that clinical trials can be conducted within 3-4 years.