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IISc researchers explore asthma drug for treating TB

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A team of researchers at the Indian Institute of Science (IISc) has found that an existing anti-asthma drug is effective against tuberculosis and can help address the problem of drug resistance as well.

The researchers observed that the drug, Pranlukast, destroys a specific metabolic pathway in *Mycobacterium tuberculosis* (*Mtb*), the causative agent of TB, which is crucial for its survival in human cells.

The drug targets a unique arginine biosynthesis enzyme which is exclusive to Mtb, thereby impeding its arginine production. It also targets the pathogen pro-survival pathways in the host, directly reducing intracellular survival of the TB bacteria.

The researchers feel that since Pranlukast is an FDA approved molecule and is already being used as an anti-asthmatic drug in various parts of the world, it has the potential to be included directly into the therapeutic regime against TB. The team plans to engage with clinical collaborators for trials in the future.