

## Old drug combination may be effective against resistant TB

Two drugs used against other infections may be effective against resistant strains of TB, according to new research.

The combination of clavulanate and meropenem was effective against 13 strains of the most drug resistant TB in the laboratory.

Clinical trials are now being planned by the US researchers, who reported their results in the journal *Science*.

TB is the commonest opportunistic infection among people infected with HIV in southern Africa and South Africa has one of the highest rates of infection globally. There is also growing concern about the rising incidence of XDR-TB - extremely drug resistant TB locally and elsewhere in the world.

The latest study revisits the effectiveness of beta-lactam antibiotics, the family which includes penicillin and is very widely used in the treatment of infection but has never been successful against TB.

This lack of effectiveness is largely because the *Mycobacterium tuberculosis* bacterium contains a highly active enzyme which inactivates the antibiotics.

In the latest study, researchers looked at several combinations of one drug to stop the enzyme working against one beta-lactam antibiotic.

They found that clavulanate was the best enzyme inhibitor and meropenem, a fairly modern antibiotic, the best partner in potentially killing different strains of TB.

Clinical trials are being planned later this year.