

Clinical trial study by Australia & Vietnam finds antibiotic treatment for drug resistant TB effective

16 January 2025 | News

Levofloxacin reduced the risk of multidrug-resistant tuberculosis (MDR-TB) in adults and adolescents by 45 percent



A clinical trial has shown that the oral antibiotic levofloxacin taken once-daily for six months substantially reduced the risk of developing drug-resistant tuberculosis (TB), and almost halved adults' and children's risk of developing multidrug-resistant TB.

The VQUIN trial was funded by the Australian National Health and Medical Research Council (NHMRC). It was sponsored by the Woolcock Institute of Medical Research at the University of Sydney and was implemented in partnership with the Vietnam National Tuberculosis Programme.

The trial enrolled 2,041 family members of people with drug-resistant TB. These family members had early infection, which had not yet developed into the active form of drug-resistant TB. The study was conducted across 10 provinces in Vietnam, a country with a high rate of drug-resistant TB.

The trial found that levofloxacin reduced the risk of multidrug-resistant tuberculosis (MDR-TB) in adults and adolescents by 45 percent. The trial findings were combined with a second trial, TB-CHAMP, that took place in South Africa and involved the same treatment in children.

Together, the two studies demonstrated that levofloxacin could stop the risk of MDR-TB among family and other household members, curtailing the global impact of this dangerous pathogen.

Evidence to date has been limited on MDR-TB preventive treatment since no randomised controlled trials had ever been conducted.