



# drishti

## Successful Trails in Treating Drug-Resistant TB

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### Why in News

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Recently, a small trial was undertaken to test the safety and efficacy of a few oral drugs against the **extensively drug-resistant TB (XDR-TB) and multidrug-resistant TB (MDR-TB)**.

- The trial showed encouraging results with a **success rate of 90%**.
- The favourable **results held true regardless of the HIV status** of the patients.

### Key Points

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- The trial (Nix-TB) tested three oral drugs namely **bedaquiline, pretomanid** and **linezolid** in patients with XDR-TB and MDR-TB.
- **Success Rate**
  - The **90% treatment success** in the case of hard-to-treat patients is at par with the success rate seen while treating drug-sensitive TB.
  - Of the 109 patients treated, **11 had unfavourable outcomes**.  
Of the 11 patients, there were seven deaths and two had a relapse during the six-month follow-up period.
  - The treatment success rate was **89% for XDR-TB and 92% for MDR-TB**.  
The MDR-TB patients included in the trial were either not responsive to standard treatment or had discontinued treatment due to side effects.

### Tuberculosis

- It is caused by **bacteria (Mycobacterium tuberculosis)** that most often affect the lungs.
- **Transmission:** TB is spread from person to person through the air. When people with lung TB cough, sneeze or spit, they propel the TB germs into the air.
- **Symptoms:** Cough with sputum and blood at times, chest pains, weakness, weight loss, fever and night sweats.

- **Treatment:** TB is treatable and curable disease. It is treated with a standard 6 month course of 4 antimicrobial drugs that are provided with information, supervision and support to the patient by a health worker or trained volunteer.

### **Multidrug-resistant Tuberculosis**

- It is a form of TB caused by bacteria that **do not respond to isoniazid and rifampicin**, the 2 most powerful, first-line anti-TB drugs.
- MDR-TB is treatable and curable by using second-line drugs.

### **Extensively drug-resistant Tuberculosis**

It is a more serious form of MDR-TB caused by bacteria that **do not respond to the most effective second-line anti-TB drugs**, often leaving patients without any further treatment options.

**Source: TH**