

## New anti-tuberculosis drug

### What is the issue?

- The anti-tuberculosis drug **Pretomanid** was recently approved by the U.S. Food and Drug Administration (FDA).
- This will be a **game-changer for treating people** with extensively drug-resistant TB (XDR-TB) and multidrug-resistant TB (MDR-TB) drugs.

### Why pretomanid was approved?

- Pretomanid is only the third drug in the last 4 decades to get FDA approval.
- This highlights the scarcity of new drugs to treat TB bacteria that are rapidly developing resistance against most available drugs.
- The all-oral, three-drug regimen of bedaquiline, pretomanid, and linezolid (**BPaL**) had a **90% cure rate** in a phase III trial in South Africa involving 109 participants.
- In contrast, the current treatment success rate for XDR-TB and MDR-TB is about 34% and 55%, respectively.

### What is the significance of Pretomanid?

- Importantly, the regimen was found to be safe and effective in curing TB in people living with HIV.
- Unlike 18-24 months needed to treat highly-resistant TB using nearly 20 drugs, the BPaL regimen took just six months, was better tolerated and more potent in clearing the bacteria.
- The shorter duration is more likely to increase adherence to therapy and improve treatment outcomes.

### What do the facts say?

- According to the World Health Organisation, in 2017, there were an estimated 4.5 lakh people across the world with MDR-TB, of which India accounted for 24%, and about 37,500 with XDR-TB.
- With only a low percentage of MDR-TB cases being treated, the actual number of people who do not tolerate or respond to available MDR-TB drugs and so will be eligible to receive the BPaL regimen is unknown.

- Though the total number of people who will require the new drug may not be high, these are people who have very little alternative treatment options that are safe and efficacious.

### **How is affordability of the drug a factor?**

- While the availability of a potent drug is welcome news, it remains to be seen if it would be made affordable, particularly in the developing countries where the burden of XDR-TB and MDR-TB is the highest.
- TB Alliance, an international NGO, which developed and tested the drug, has already signed an exclusive licensing agreement with a generic-drug manufacturer for high-income markets.
- Making the drug affordable to those with extreme form of drug resistance will be highly commendable and needed model to be followed.
- There is a compulsion to keep the prices low and increase treatment uptake to stop the spread of highly drug-resistant TB bacteria.

**Source: The Hindu**

