

## **10.07 BPaLM treatment in MDR TB**

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### **Abstract**

In 2022 the WHO released an updated set of consolidated guidelines on the treatment of multi drug resistant TB. Recommended in this was the use of BPaLM, which combines Bedaquiline + Pretomanid and Linezolid for a 6-to-9-month treatment plan. They based this rationale on improved success rates, as well as lower deaths and failures when compared to other treatment plans.

In 2020 the New England Journal of Medicine Published a paper called the treatment of highly resistant Pulmonary Tuberculosis, a study done for the Nix TB alliance. This South African study demonstrated a successful outcome in 95 of the first 107 patients after six months of treatment with BPaL and six months of post-treatment follow-up.

This regimen replaces the previously used 18-month oral regimen, consisting of combinations of quinolone, Bedaquiline, linezolid; in addition to Clofazamine, Prothionamide and terizidone. This regimen typically consisted of a combination of 5 drugs depending on mycobacterial phenotypic sensitivity testing.

In May 2022 St James Hospital started using BPaLM as an alternative treatment for multidrug resistant TB, a treatment plan that ranges from 6-9 months depending on complexity. This poster will highlight the benefits of this shorter treatment plan, such as The WHO regimen containing 5 medications costing 174,109 euro (18 months of treatment), whereas the BpaLM regimen costing an estimated 68,090 euro (6 months), or that patients are given medications for a shorter period reducing side effect exposure, while demonstrating its improved efficacy.

Age/Sex		Duration	Treatment
65 F Ukrainian	Pulmonary Disease	9 Months	BPaL
42 M Ukrainian	Pulmonary Disease	6 Months	BPaLM
31 F Latvian	Pulmonary Disease	6 Months	BPaL
32 M Ukrainian	Pulmonary Disease	6 Months	BPaL