

5.17 An Analysis of The Cost of New Treatments for Multi-Drug Resistant Tuberculosis

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The prevalence of Multi-Drug Resistant (MDR) TB in Ireland is increasing, with seven cases diagnosed to date in 2022. Its treatment has significant financial implications, often requiring inpatient isolation and prolonged treatment courses. This was a retrospective cohort study, analysing all patients who were treated for MDR TB in the National Tuberculosis Centre over a 15 year period. Medications prescribed to this cohort were reviewed with an aim to analyse the relative cost of newer TB regimens. A total of 42 patients were diagnosed with MDR TB in our centre between 2007 and 2022.

During this time there were several major shifts in its treatment from the use of intravenous aminoglycosides to the advent of Bedaquiline and all oral regimens, followed more recently by the six month BPALM regimen. The costs of each Group A and B drugs with predicted cost for BPALM vs WHO vs IV regimens are listed below. While the newer medications used are expensive, their price is offset by advantages including significantly shorter treatment duration and removal of costs associated with intravenous medications including hospital bed days, nursing care and OPAT services. This study investigates the cost-analysis of the newer regimens compared to previous regimens.

Medication	Cost (euro)
Bedaquiline	7,926 per month
Linezolid	692 per month
Pretomanid	278 per month
Moxifloxacin	68 per month
Cycloserine	574 per month
Clofazamine	192 per month
BPALM Regimen (estimate)	68,090 (6 months total)
WHO Regimen Containing 3x Group A and 2x Group B drugs (Estimate)	174,109 (18 months total)
Older regimens including IV aminoglycosides (Multiple medication options with courses up to 24months)	Varied from 42,965 up to 97,433 (total cost)

Table 1(5.19) Drug costs

Conflict of Interest: None to declare