F.7	Ethambutol IV infusion 1000 mg and 2000 mg
Does the application adequately address the issue of the public health need for the medicine?	☒ Yes ☐ No ☐ Not applicable Comments: The application address the need for this medicine in general for TB for which oral ethambutol is indicated and includes potential scenarios where IV formulation would be necessary
Briefly summarize the role of the proposed medicine(s) relative to other therapeutic agents currently included in the Model List, or available in the market.	Oral ethambutol is already included in EML and the application is requesting for IV formulation among **severely ill patients and those who have absorption disorders**
Have all important studies and all relevant evidence been included in the application?	☒ Yes ☐ No ☐ Not applicable If no, please provide brief comments on any relevant studies or evidence that have not been included:
Does the application provide adequate evidence of efficacy/effectiveness of the medicine for the proposed indication?	☐ Yes ☒ No ☐ Not applicable Briefly summarize the reported benefits (e.g. hard clinical versus surrogate outcomes) and comment, where possible on the actual magnitude and clinical relevance of benefit associated with use of the medicine(s). Although the application includes target populations where it is beneficial, they don't provide evidence (lack of evidence) that IV has better efficacy compared to oral formulation. Is there evidence of efficacy in diverse settings (e.g. low-resource settings) and/or populations (e.g. children, the elderly, pregnant patients)?
Does the application provide adequate evidence of the safety and adverse effects associated with the medicine?	☐ Yes ☒ No ☐ Not applicable Comments: "Unfortunately, there is no published information about specific side effects of ethambutol due to iv route of administration, it is assumed that all side effects may be similar to those that occur with prolonged infusions - inflammation and pain at the catheter insertion site, the risk of infection and thrombosis, but all these phenomena should be studied in a special study."

Are there any adverse effects of concern, or that may require special monitoring?	☐ Yes ☐ No ☐ Not applicable Comments: Unknown
Briefly summarize your assessment of the overall benefit to risk ratio of the medicine (e.g. favourable, uncertain, etc.)	Uncertain- Patients still need to take oral TB meds. No evidence of superiority compared to oral drugs among targeted population
Briefly summarize your assessment of the overall quality of the evidence for the medicine(s) (e.g. high, moderate, low etc.)	low
Are there any special requirements for the safe, effective and appropriate use of the medicine(s)**?** (e.g. laboratory diagnostic and/or monitoring tests, specialized training for health providers, etc)	☐ Yes ☐ No ☒ Not applicable Comments:
Are you aware of any issues regarding the registration of the medicine by national regulatory authorities? (e.g. accelerated approval, lack of regulatory approval, off-label indication)	☐ Yes ☐ No ☐ Not applicable Comments: Only approved 6 Asian and European countries
Is the proposed medicine recommended for use in a current WHO Guideline approved by the Guidelines Review Committee? (refer to: https://www.who.int/publications/who-guidelines)	☒ Yes ☐ No ☐ Not applicable Comments: Yes, only in specific situation- IV formulations should be reserved for cases of severe forms of disease, such as central nervous system (CNS) TB or TB sepsis. However, WHO working group recommends against including this medicine in EML due to potential overuse over oral drugs
Briefly summarize your assessment of any issues regarding access, cost and affordability of the medicine in different settings.	Oral formulation is much cheaper compared to present cost of IV formulation
Any additional comments	

Based on your assessment of the application, and any additional evidence / relevant information identified during the review process, briefly summarize your proposed recommendation to the Expert Committee, including the supporting rationale for your conclusions, and any doubts/concerns in relation to the listing proposal.	The recommendation is uncertain. There is limited role for IV ethambutol and despite using this IV, oral TB drugs (pyrazinamide) are still needed in intensive phase. Oral medications can still be given via temporary NG tube and in fixed dose combination pills.
References (if required)	