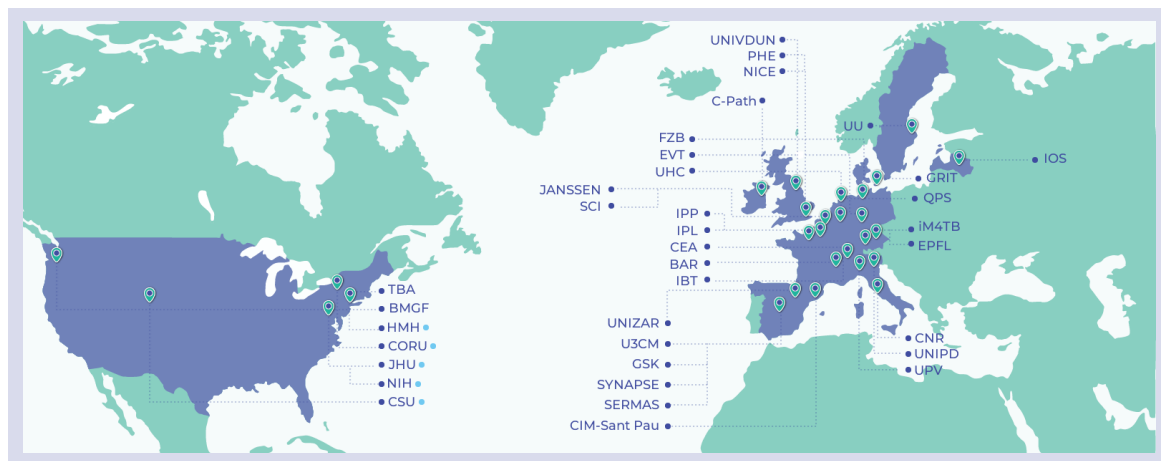


Accelerates the development of new treatment regimens for *Tuberculosis*

The ERA4TB (European Regimen Accelerator for Tuberculosis) project is a public-private initiative dedicated to the development of drugs against tuberculosis. With more than **30 organizations from 13 countries** and a budget of over **200 million euros funded by the EU Programme Innovative Medicines Initiative (IMI)**, ERA4TB will focus on developing new, improved tuberculosis treatments.

ERA4TB is led by **Universidad Carlos III de Madrid, Institut Pasteur and GlaxoSmithKline Spain** and comprises key public and private stakeholders in the field who have joined forces to enact a progression pipeline that leverages research excellence and resources in Europe to be able to undertake preclinical and clinical development activities for individual compounds and combinations.

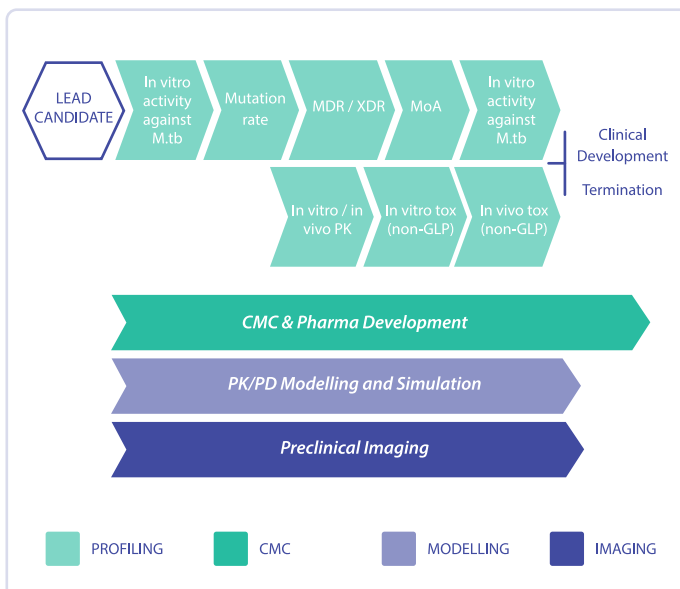


● Collaborating partners

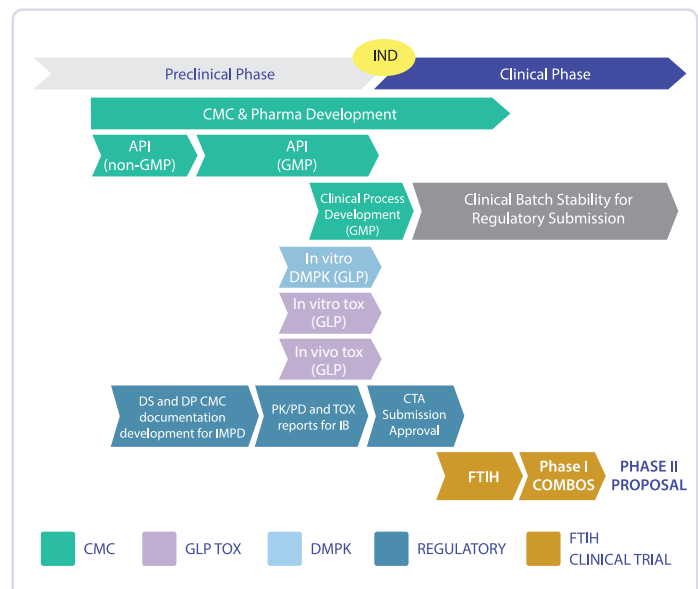
The main objective of ERA4TB is to create a European open platform to accelerate the development of new regimens for the treatment of tuberculosis, a disease that causes around 1.4 million deaths annually in the world, according to the World Health Organization (WHO).

ERA4TB is expected to revolutionize the way in which tuberculosis treatments are developed thanks to its parallelized, multi-entry pipeline structure, analogue to a production line. This structure will enable to systematically investigate the efficacy of several drug candidates and combinations simultaneously while allowing new molecules to enter the project pipeline at the research stage.

PIPELINE FOR PRECLINICAL PROFILING



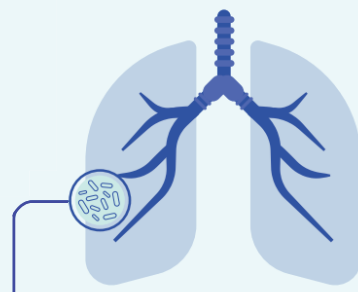
PIPELINE FOR PORTFOLIO AND EARLY CLINICAL DEVELOPMENT



TREATMENTS FOR TUBERCULOSIS

Tuberculosis is a disease that mostly affects the lungs and it is the **main infection-related cause of death at global level**.

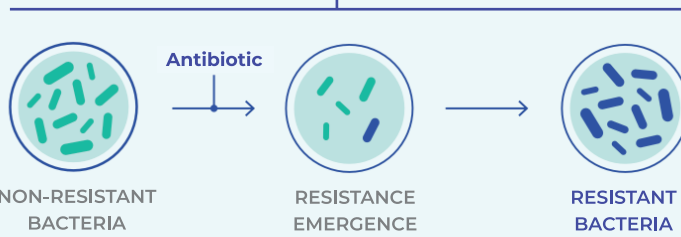
It is caused by the bacterium *Mycobacterium tuberculosis*. **Multi-resistant strains** of these bacteria have already appeared, for which there are no treatments.



ERA4TB is a European platform created to **accelerate the development of treatments** for this disease, especially in its most resistant variants. It intends to investigate the greatest number of **new potentially effective drugs** to develop the future treatments for tuberculosis.

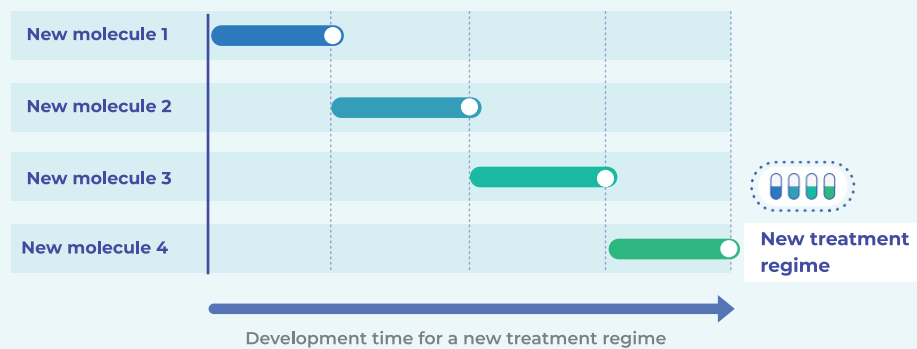
All these drugs must meet the **following features**:

- High bactericide activity.
- High specificity for *Mycobacterium tuberculosis* strains.
- Oral administration.
- Compatible with other existing tuberculosis drugs.



Classic drug design

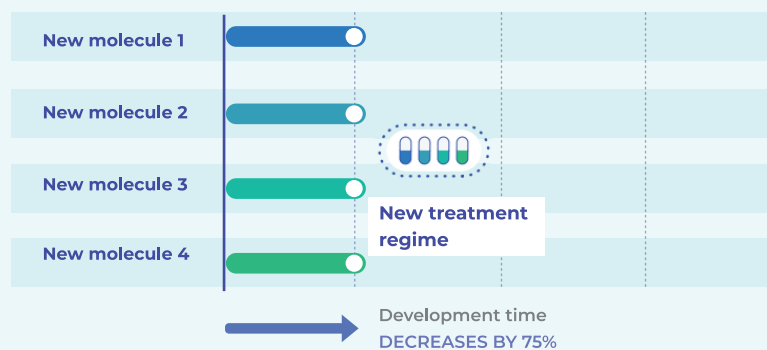
Tuberculosis is treated with a **combination of antibiotics**, generally of four different types. Historically, for the formulation of these treatments, molecules were developed following a **sequential process**: when one of them was approved, this one would replace previous suboptimal therapies.



However, this process is **long and inefficient**, which increases the chances of **interrupting the treatment** and the **emergence of resistances**. Therefore, in the last years, new strategies to accelerate and facilitate the development of new drugs have been researched.

A new strategy

The ERA4TB platform aims at replacing the sequential drug development with a **parallel development**. In ERA4TB, all the molecules are investigated simultaneously, reducing the development time of new treatments and, with this, hindering the emergence of resistant strains.



With this approach, ERA4TB will allow the **development of treatments in a faster, safer and more effective way**. Moreover, by reducing the development times, **the costs will drop** too, which means that the future tuberculosis treatments will be more affordable.



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