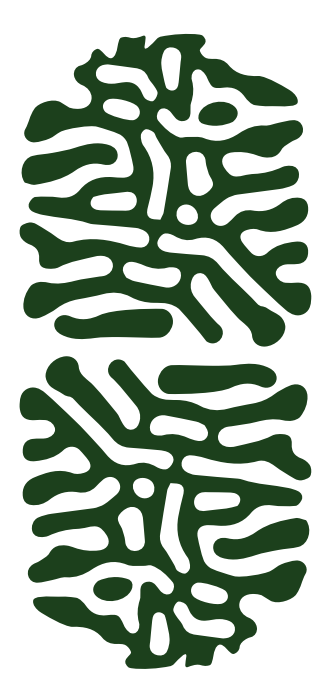




Dreams

Drug Repurposing with Artificial Intelligence for Muscular disorders

DREAMS aims to discover **therapies for neuromuscular disorders (NMDs) with Artificial Intelligence**. As a European Research and Innovation initiative, the project will implement novel approaches for target and small molecule discovery to **develop faster and more effective treatments**, improving patients’ lives.

Key pillars

01

Cells, Data and Algorithms

Cellular assays are created to study initial diseases, with data generated using skeletal muscle cells derived from induced pluripotent stem cells (iPSCs).

02

AI-Powered Drug Discovery

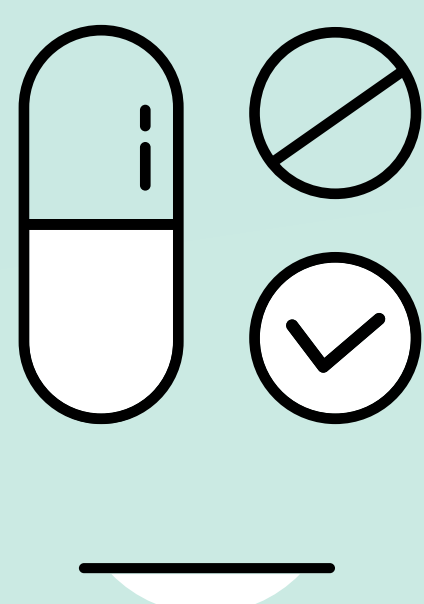
Drug discovery and validation of predictions, as well as the exploration of extended therapeutic indications, are conducted through novel AI models.

03

Towards Therapy

Clinical validation of treatments is prepared by developing adaptive clinical trial strategies for drug candidates targeting multiple indications.

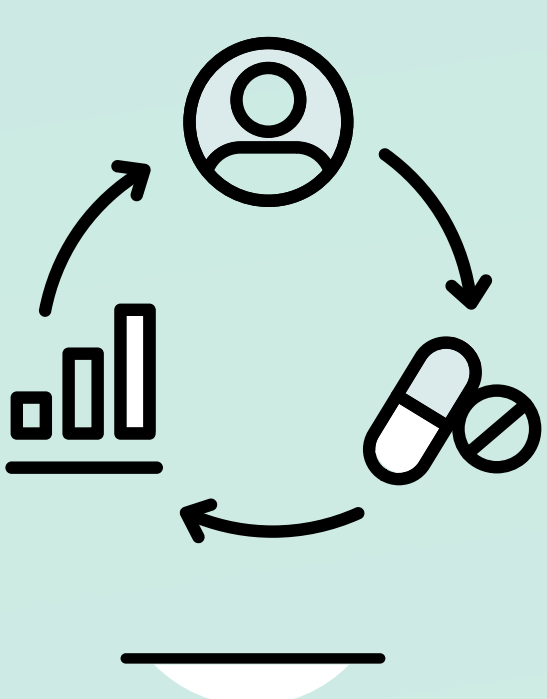
Expected outcomes



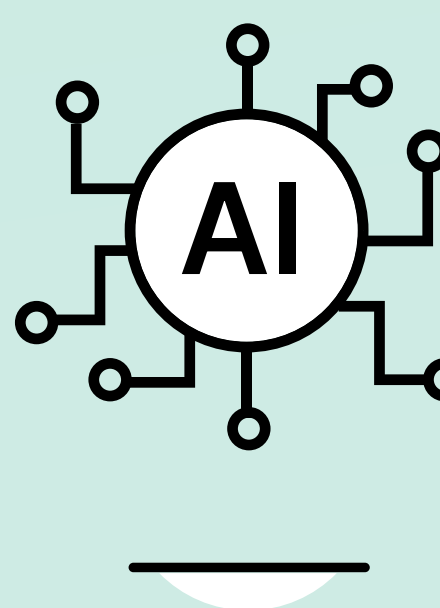
Discover novel **therapies** for various NMDs and related conditions.



Improve insights into the core **mechanisms of rare disease** processes.



Establish new **clinical trial designs** for diverse patient populations in rare diseases.



Develop the first reusable **drug discovery platform** using AI and iPSCs to identify safe and effective treatments for rare diseases.

dreamshorizon.eu



@DreamsPjt_EU



DREAMS project. Funded by the European Union under 101080229-2. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union (EU) or European Research Executive Agency (REA). Neither the EU nor REA can be held responsible for them.

