Target ID and drug repurposing

Apply ML to a universe of targets to identify novel targets that fit your selection criteria

Description

Uncover new drug targets or new uses for established targets via exhaustive network analysis leveraging Clarivate's biomedical Knowledge Graph

Expert-curated datasets containing

- **4.6M+** Molecular interactions
- **1,500+** pathway maps
- **746K+** drugs and biologics
- **2.7M+** gene-disease associations
- **10M+** patents

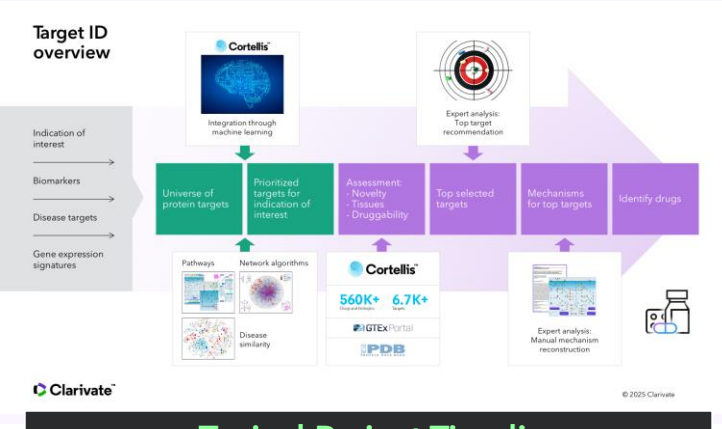
Clarivate™

Methodology

- An extensive set of features is computed proteome-wide describing each protein's
  - Network proximity to disease biomarkers
  - Involvement in pathways and processes implicated in the disease
  - Existing drug development in other molecularly similar indications
- Given known validated targets of the disease, a predictive model is trained to prioritize targets most similar to validated targets across the feature space
- Top targets are further characterized and annotated with information on target biology and competitive landscape
- Expert-led manual biological interpretation is conducted through literature review for top targets to build further scientific rationale supporting the protein as a potential target for the indication

Output

- Table of prioritized targets with annotations relevant to the indication of interest
- Supporting evidence reports for top targets providing details of target biology, relevance to the disease and competitive landscape
- Literature review report summarizing available scientific rationale for the target modulation in the disease of interest



Typical Project Timeline

From 8 weeks, subject to complexity

Select case studies available upon request