Incubate bio has developed a causal AI platform (ALaSCA) that allows us to help customers i) understand biological mechanisms, ii) simulate the effects of changing values in the mechanisms, and iii) optimise to find the best intervention site for wet lab experiments.

We are utilising ALaSCA in a simple cost-effective Services offering for the following areas:

1. Explanation of the Mechanism of Action for a compound/treatment, by determining which proteins within a protein family are mainly responsible for exerting the effect of the compound/treatment.

2. Development of second generation drugs or co-therapies which could be more effective at changing the disease outcome than the targets of an existing compound/treatment, by determining interesting potential upstream/downstream targets from existing treatment data.

3. Extension of the indication of a compound/treatment, by determining how central its target(s) is to the progression of a new disease of interest and simulating its effect in the new disease.

4. Identifying new targets for a disease, by investigating the effects of genes/proteins/pathways of interest on disease progression.

5. Determination of the optimal intervention on several potential targets, by performing *in silico* experimentation based on previous or public wet lab data.

6. Mechanism testing, by determining which proposed mechanism best explains the observed disease or treatment outcome(s).

"ALaSCA has enabled us to computationally explore and quantitatively assess multiple rare diseases (including ADPKD) in which to further exploit our underlying technology platform. This has allowed us to rapidly prioritise resources to those areas where our compounds are likely to have the most beneficial effect. ALaSCA has saved us potentially several months of time and wet lab experiments."

Neil Wilkie, CEO, Mironid Ltd

For more information
https://incubate.bio
ALaSCA@incubate.bio