

Systems Biology India

www.systemsbiology.fi

Year of Incorporation: 2007

Category of Innovation: Business Process & Business Model



Company overview: Experts in areas such as bioinformatics, chemoinformatics, machine learning, datamining, artificial intelligence and software development

Innovation: The pharmaceutical industry is facing a crisis internationally with rising research and development costs, and strict evaluation of new medicines by FDA in the USA. Systems Biology's US Patent pending software Ontomine, addresses various challenges currently facing the pharma sector. The technology does so by sticking to very basic principles of chemistry and relating them to thousands of known diseases and toxic effects. It takes a molecule structure as input and predicts the diseases and symptoms it can help cure and any possible side effects. The simple nature of the algorithm means that scientists can easily interpret its reasoning.

Impact of Innovation

External: Ontomine is expected to substantially reduce the cost of new drug discovery and lead to identification of new classes of molecules. Initial evaluation by world leading pharmaceutical and research institutes indicates that the product is very good at predicting the therapeutic use of molecules.

The innovation has enabled the company to work with pharmaceutical organisations and non-profit research organisations like OneWorld health to develop new medicines for the Indian subcontinent and Africa.

