

## BioCuTech- A novel technology for optimizing sub-optimal drugs to best-in-class new molecular entities

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By leveraging on our “BioCuTech” platform for the designing and development of novel therapeutic molecules, we could bring small molecules with synergistic mechanisms of actions in to the pipeline; the designed molecules will have promising therapeutic potential, safety and efficacy than the marketed molecules. Krisani Bio’s proprietary Synergistic Prodrug discovery technology utilizes a differentiated model for the discovery of novel molecules by modifying the structure of the suboptimal drug by selecting within the vast repository of pharmacologically active natural molecules to design a novel synergistic prodrug with discrete pharmacological characteristics. A robust mathematical and logical approach is utilized to screen the endogenous synergistic pharmacologically active molecules to act in concert with the drug molecule. The designed Synergistic Prodrug efficiently performs distinct physiological functions by simultaneously modulating multiple biochemical pathways and disease targets and also enables the suboptimal drug molecules to be more bioavailable, efficacious and safe. Our Synergistic prodrugs are engineered to split apart in the blood stream, releasing the sub-optimal therapeutic agent and pharmacologically active natural molecule that generally have well-studied, favorable safety characteristics. Utilizing the know-how of the proprietary platform technology, several US and world-wide patents were filed with the respective patent offices. A few of the development and pipeline candidates: neuropathic pain- lidocaine derivative of R-lipoic acid; Huntington’s disease- cysteamine derivative of EPA; Wilson’s disease: D-penicillamine derivative of N-acetyl-cysteine; metastatic cancer: tyrosine kinase inhibitor and HDAC inhibitor.

### Biography

Mahesh Kandula is the CEO and Chief Scientific Officer of Krisani Biosciences. Prior to joining Krisani Bioscience, he was an Associate Director of Global Research & Development of Indigene Pharma located in Boston, USA, where he was responsible for drug design and development as well as IP portfolio management. He is the inventor of a bio-technology based R-LA production using gluconobacter oxydans. He has been responsible for co-inventing and/or bringing 6 compounds from inception into different development phases as potential new therapeutics to treat genetic disorders, diabetes and diabetic complications. He holds a Master of Technology degree in biotechnology and biochemical engineering from IIT.

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