



Case Study

SoluPath™ Improves Bioavailability by 4x in Just Three Months

The Challenge One of the biggest challenges faced by pharmaceutical scientists is poor solubility and bioavailability of new molecular entities (NMEs). A small biotech company was developing a compound with poor solubility and bioavailability, and needed help determining the best formulation to overcome these issues.

The Solution We started with an upfront assessment of the solid-state and biopharmaceutical properties of the drug substance. The results were used to guide prototype formulations. Then employing the parallel screening approach of SoluPath™, several technologies were evaluated, including solid dispersion (by spray drying), particle size reduction methods (by high energy wet milling to produce reduced particle size suspensions), and lipid-based delivery systems.

The Outcome Based on the data, the bioavailability of the compound was increased by more than four times. In just three months, the compound was able to progress from preformulation to clinical formulation development with significantly improved chances for success in First in Man trials.

