

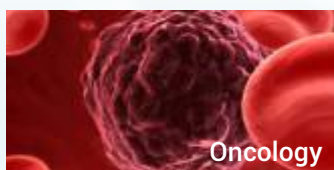
# Integrated Drug Discovery Solutions



## Innovation-driven Collaborations to Accelerate your Discovery Programs

GVK BIO utilizes its expertise in Medicinal Chemistry, CADD, DMPK, *In Vitro* and *In Vivo* models to provide customized Integrated Drug Discovery Solutions leading to preclinical candidates. Our strong scientific team works closely with clients to select and execute the most promising strategy to deliver project goals in the shortest possible time. We have a proven track record of providing cost effective, innovative and highly efficient solution towards delivering clinical candidates to our collaborators.

### Focus Therapeutic areas:



We provide Integrated Drug Discovery solutions ranging from hit, lead generation and lead optimization to an optimized preclinical candidate for development.

#### Hit Generation

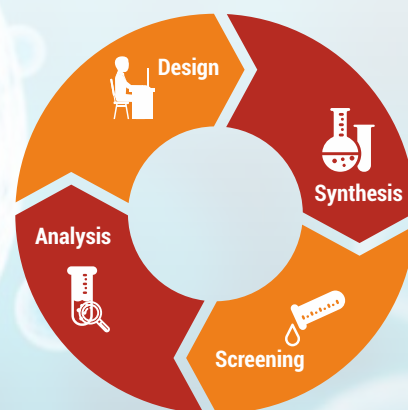
Virtual Screening, High-throughput Screening on commercial / client provided library and Knowledge-based design

#### Lead Generation

Multi Parameter Optimization (MPO): Identification of potent and selective compounds with desirable PK parameters & evidence of target engagement

#### Lead Optimization

Optimization of potency, PK, efficacy and safety profiling to deliver a pre-clinical candidate



**PROGRAM SETUP**

**HIT**

**LEAD**

**DRUG CANDIDATE**

**IND**

#### Validation

- Project feasibility
- Reference compound synthesis and profiling
- Assay development for potency and ADME
- Virtual library design

#### Optimization

- Medicinal Chemistry
- Computational Chemistry
- *In Vitro* potency
- In-depth ADME, PK, *In Vivo* efficacy
- Exploratory Tox

#### Regulatory Studies

- Patent filling
- GLP / GMP manufacturing: USFDA, PMDA
- Metabolism
- Met ID characterization

## INTEGRATED DISCOVERY TEAM:

Small molecule drug discovery requires a deep knowledge of disease biology and medicinal chemistry. Over the years, GVK BIO has developed an expertise in the area of oncology, pain, inflammation and cardio-metabolic diseases. GVK BIO integrated drug discovery solutions team has the experience of working in big pharma in the west and bring with them the expertise and know-how to advance small molecule into clinics.

## Experience

>25 Integrated programs with Big Pharma/Biotech/Virtual companies

## Track Record

Delivered 1 clinical & 7 preclinical candidates

## Scientific Expertise

Inventors on >25 patents and 4 publications in the last 7 years

## AUXILIARY TEAM:

Our medicinal chemists work in collaboration with a experienced group of synthetic chemists. Their experience is utilized at the various stages of drug discovery right from library synthesis, reference molecule synthesis, asymmetric synthesis and scale-up. They also bring differentiation in terms of having hands-on experience with not only heterocyclic chemistry but also carbohydrate, peptide, steroid and nucleotide chemistry.

A team of >100 biologists (India and USA) routinely assist collaborators with protein production, assay development, DMPK and *in vivo* disease models. This vast experience is readily utilized by discovery team during discovery programs.

## GVK BIO ADVANTAGE-DISCOVER THE DIFFERENCE:

### Infrastructure

- >500,000 sq. ft. of dedicated lab space (>700 fume hoods, AAALAC accredited Animal facility)
- 5 independent research centres with 24/7 analytical support and ancillary functions
- State-of-the-art Analytical Instrumentation including UPLCs and SFCs to speed up the analysis and purification process
- USFDA approved GxP facility for CMC development

### IP and Confidentiality

- Restricted access control to ensure IP protection and confidentiality of client programs
- Training to the team on IP sensitivity
- Secured IT infrastructure with Websense Triton APX DLP implemented for protection against advanced threats and data theft
- No Conflict Model: Target exclusivity is given to the client

### Resources

- Large pool of highly skilled 2100 scientists including 200 PhDs
- Strong computational & informatics group with proprietary Biomarker and SAR Database
- Robust cross-functional project management capability

### Resources

- Flexible business models
- Ability to quickly scale-up infrastructure and skilled manpower as per client requirement

Leading Small Molecule CRDO



Large Molecule Discovery Partner



To know more, contact us at:

[bd@gvkbio.com](mailto:bd@gvkbio.com)

India | USA | Netherlands