



Bioinformatics

Integrated *in silico* modeling to accelerate drug discovery

Analyzing data with the most appropriate *in silico* framework is just as important as running pharmacology studies in the most clinically relevant models. Add significant value to your drug candidate through biomarker discovery and validation, study design and analysis, model selection, and evaluating combination effects.

Biomarker Discovery and Validation

Identify, qualify, and validate biomarkers of response by correlating genomic and proteomic data with efficacy using our proprietary framework:

- Streamline biomarker discovery from *in vitro* pharmacology raw data with our user-friendly automated biomarker discovery tool.
- Uncover potential predictive biomarkers via analysis of high throughput cell line screens (**OmniScreen™**).
- Improve patient stratification by analyzing mouse clinical trial (MCT) data beyond simple efficacy metrics and endpoint based analysis.
- Rescue previously unsuccessful drugs through reinterpretation of clinical trial results.

Advanced Study Design, Analysis, and Model Selection

Elevate study design and analysis beyond simply looking at target gene expression or t-test/ANOVA, and select the most appropriate tumor model for your cell line, *in vivo*, or organoid study:

- Better inform drug development with empirical analysis of new and historical data and advanced statistics.
- Enhance accuracy by quantifying activities for all canonical pathways and correlating pathway activities to target gene and protein expression.
- Increase confidence by correlating target gene expression to patient clinical information and public databases.
- Optimize MCT study design through our published statistical framework.

Combination Effect Analysis

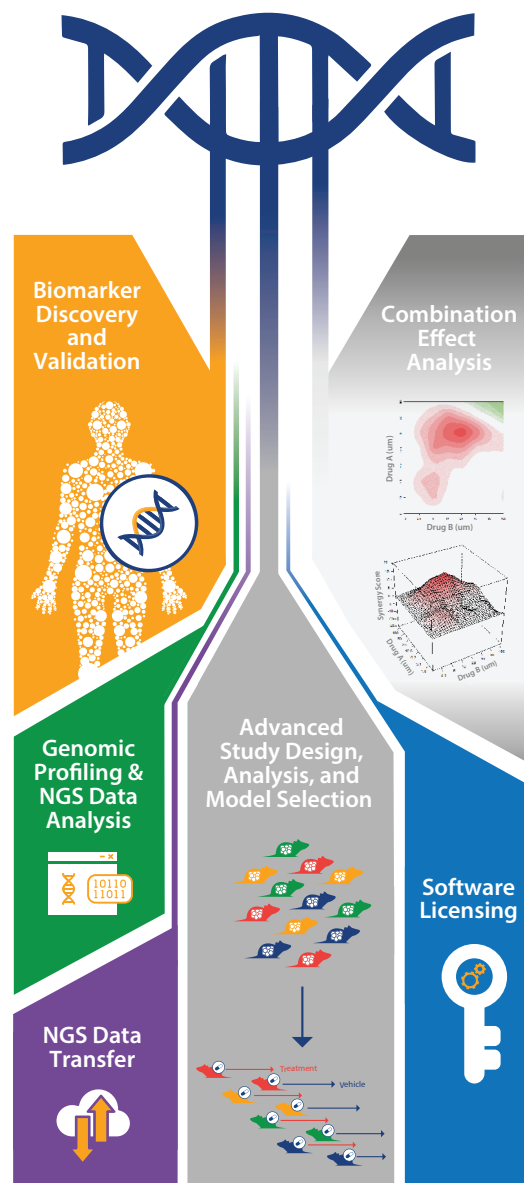
Statistically evaluate two-drug combinations to determine synergistic, antagonistic, and additive effects:

- Readily visualize and understand the combination effects of your compounds *in vitro* or *ex vivo* with **CrownSyn™**.

Other Available Services

- Genomic profiling and NGS data analysis.
- Secure NGS data transfer.
- Software licensing.

Bioinformatics Capabilities



Contact Sales
US: +1.855.827.6968
UK: +44 (0)870 166 6234
busdev@crownbio.com

Schedule Scientific Consultation
Request a consultation to discuss your project.
consultation@crownbio.com

Additional Resources
Read supporting publications, white papers, watch presentations, and more.
crownbio.com/resources