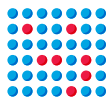


Therapeutic Development



TARGET VALIDATION

Potential targets identified by discovery science are confirmed to play a causal role in disease development.



DRUG SCREENING

Large numbers of chemical or biological agents are screened to identify and validate molecules that hit the target.



LEAD IDENTIFICATION

Agents that hit the target are evaluated to determine which ones bind the target with the greatest specificity and have the most promising medicinal properties.



LEAD OPTIMIZATION

The characteristics of lead compounds are optimized to enhance potency and drug-like properties, and to reduce side effects by enhancing specificity.



PRECLINICAL TESTING

Optimized lead compound(s) are tested in cell-based and animal models for effectiveness, potential toxicity, optimal starting dose, and dosing schedule for clinical or “first-in-human” testing. The final compound(s) are considered the clinical candidate(s).



INVESTIGATIONAL NEW DRUG

One or more clinical candidates are generated through good manufacturing practices and assessed in rigorous good laboratory practice studies before submission to the U.S. Food and Drug Administration for approval to use in clinical trials.