Target identification & validation	Hit discovery	Hit-to-lead	Lead optimization	Preclinical	Clinical trials
Discovering and confirming disease-relevant biological targets through genomics, proteomics, and experimental models.	Identification of molecules with desired activity against the target in High Throughput Screens.	Synthesis and testing of analogs of hits to establish structure-activity relationships	Iterative refinement of lead compounds to optimize complete property profile.	Test of most promising lead compounds in multiple species. Results important to decide whether to move into clinical trials.	Drug candidates are tested in humans and assessed for safety and efficacy to warrant regulatory approval.