



# The Drug Development Process

## IND Enabling Studies:

Test animals for toxicity; demonstrate potential efficacy; select dose(s) to be given in trials

## FDA Review of IND Application:

FDA considers: potential risks of the drug and potential for benefit; FDA may request additional pre-clinical (animal) studies to address questions about risk and/or benefit. Sponsor proceed with clinical trials until FDA reviews & approves plan for studies in humans.

... results of animal studies, and proposed plan for clinical trials.

## Keeping Patients Safe

Data Safety & Monitoring Board (DSMB) oversees safety & monitors data quality  
IRBs oversee ethical conduct of research & protection of human subjects  
Study team monitors patient safety; documents & reports any adverse events  
Patients / families notify study team if there are side effects or any safety concerns

## Select Outcome Measures

To know if a drug is effective, researchers need to measure its effects on the individual and the disease. Does the drug slow disease progression? Does the drug treat certain specific symptoms? To answer these questions, researchers select outcome measures that can tell us if the drug has a meaningful impact on how the patient