# **Oncology In Vivo Data Integration for Hypothesis Generation**

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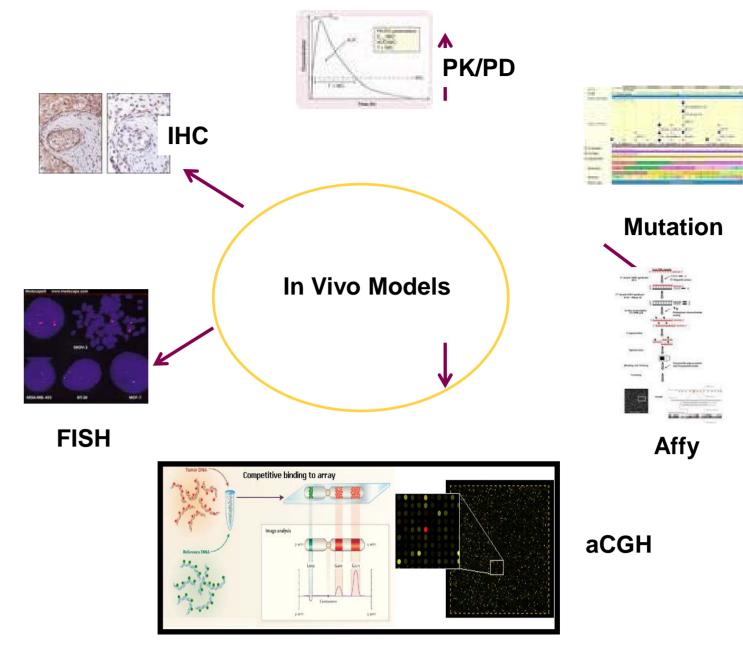
## What is InVivoDB?

- A web tool to manage all the Oncology In Vivo studies
  - Provide integrated data collection, analysis and storage solution to support In Vivo animal studies
  - > Enable fast data retrieval through searchable framework and beat the 24hr challenge
  - $\succ$  Enable efficient data exploitation and data sharing across AZ sites
- Provide data integration, visualization and analysis capability ۲ to facilitate hypothesis generation and prediction from preclinical to clinical
  - Provide single point access to diverse data types
  - > Efficacy, tolerability and PK/PD data
  - > Animal model information with Genetics and Genomics profiling data

#### **Benefits**

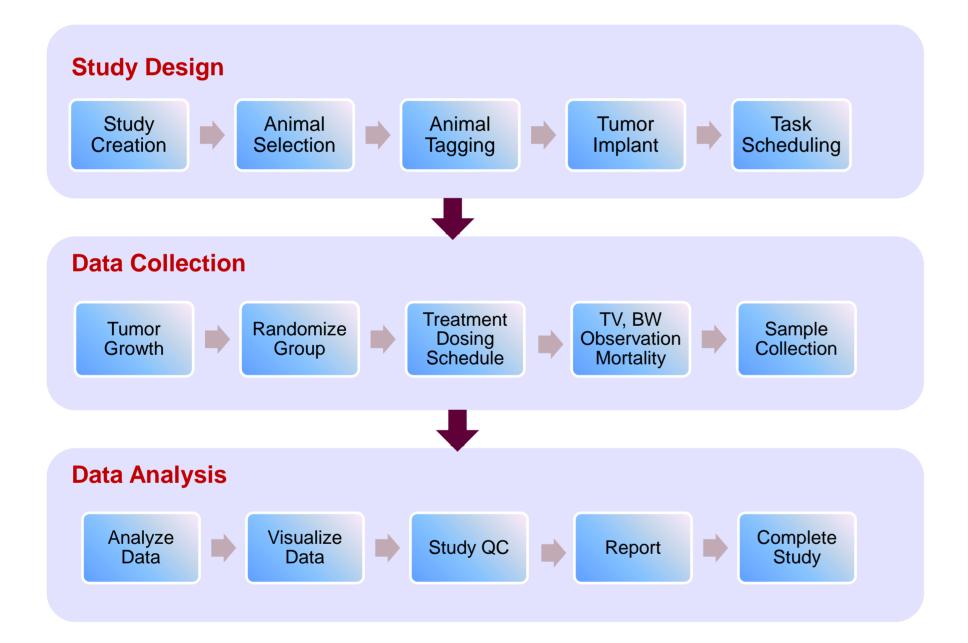
- Correlate molecular characteristics to in vivo efficacy
- Identification of responsive animal models

### **Supported Data Types**



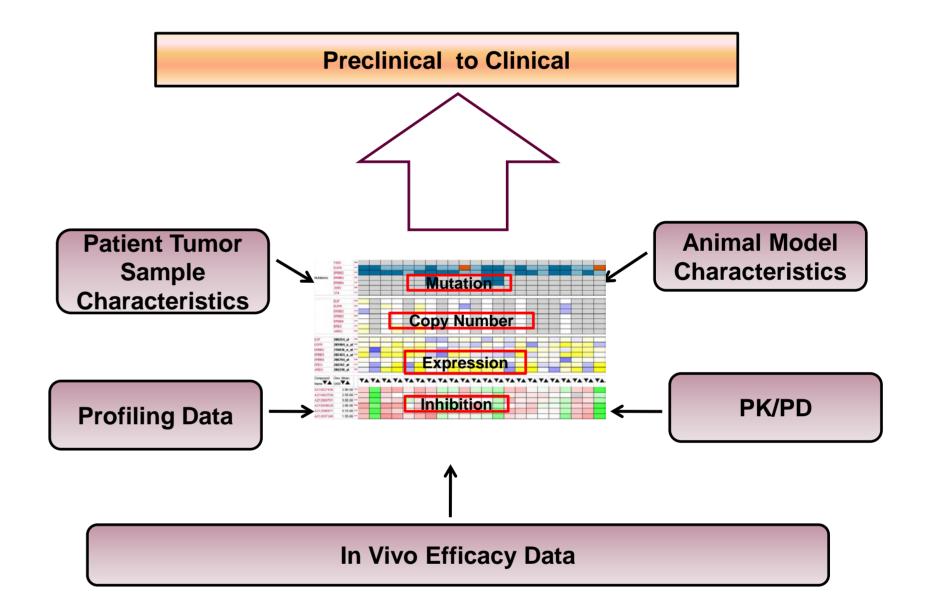
- Evalulate compound selectivity and MOA
- > Determine disease response (Tumor type)
- Compare efficacy between AZ and competitor compounds
- Support target validation

#### InVivoDB – Animal Study Data Workflow

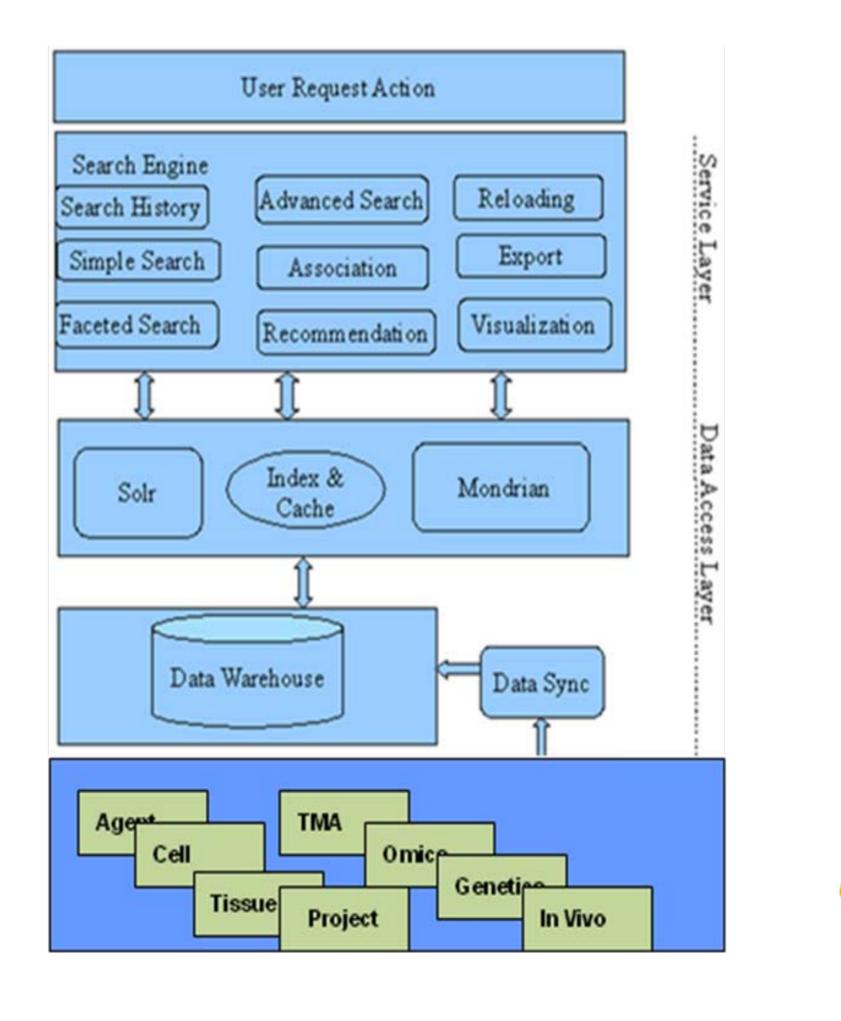


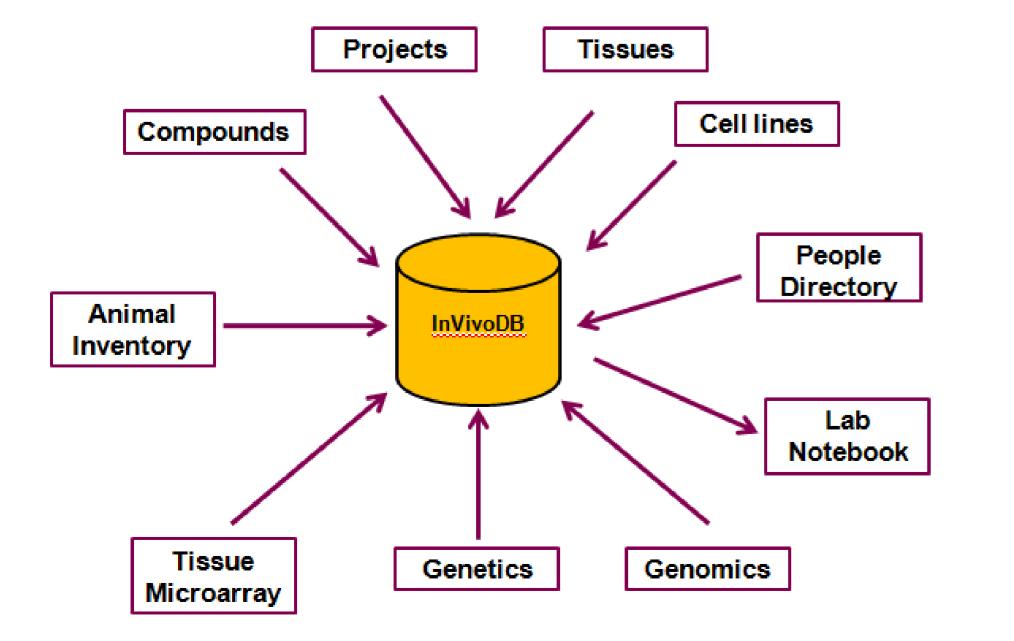
InVivoDB Interactions with other AZ Systems

#### In Vivo Data Clustering for Hypothesis Generation



#### **System Architecture**





#### Acknowledgement

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