

## Drug resistant models

- Comprehensive portfolio of drug resistant models
- 10+ cancer types
- 25+ key targets
- 30+ leading drugs
- 100+ resistant models
- 1,000+ validation data

Wide range of drug resistant models established in multiple strategies



Acquired resistance  
in tumor-bearing mice



Acquired resistance  
in cell culture



Genetic engineering of  
reported mutations



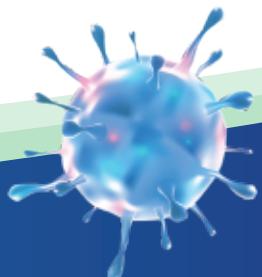
PDX based on clinical  
resistant patients

### Our experience and expertise focused on drug resistance

- Collaboration with **100+** clients across the world to develop combinatory or next-generation therapeutic strategies
- **400+** projects delivered with high quality and efficient timeline.
- **20+** experts dedicated to this platform with deep understanding in drug resistance biology
- **10+** years experience in cancer pharmacology
- Multidisciplinary **bioinformatics** and **analytical** capabilities enabling clear and in-depth understanding of mechanisms
- A comprehensive range of models representing **clinically relevant** mechanisms of resistance

### Potential strategies for overcoming drug resistance

- Supporting next-generation targeted drug discovery overcoming the acquired resistance, e.g., 4<sup>th</sup> generation EGFR TKI evaluation in Osimertinib resistant models.
- Exploring potential combination strategies to maximize the therapeutic efficacy and overcome the drug resistance, e.g., Sotorasib (AMG510) combined with SHP2 targeted agents in Sotorasib resistant models.
- Differentiating from the existing drug portfolio. For example, novel antibody-drug conjugates (ADCs) or new modalities in DS-8201 or T-DM-1 resistant models

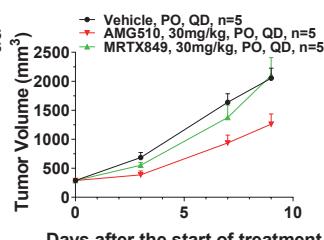
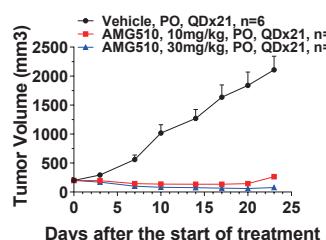


## Case study: acquired resistant model of KRAS G12C inhibitor

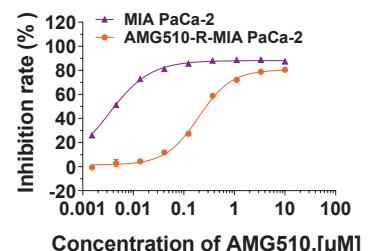
### Resistance phenotype



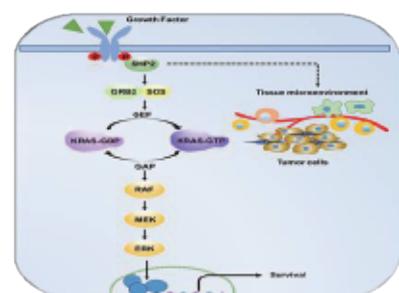
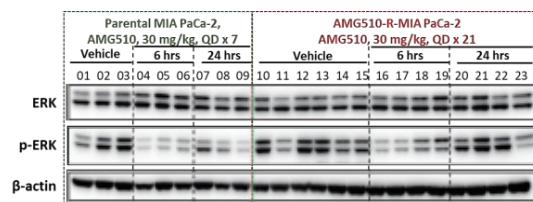
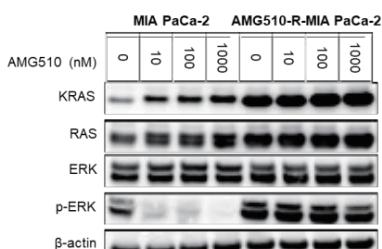
*in vivo* models



*in vitro* assays



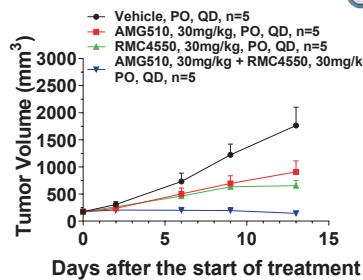
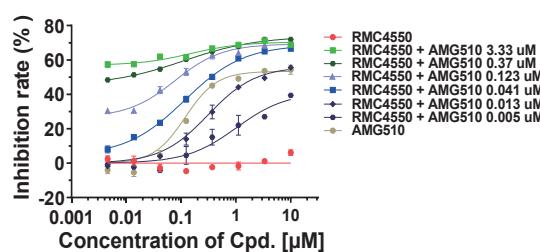
### Resistance mechanism



### Overcoming resistance



**Small molecule inhibitors**



**Immune checkpoint inhibitors**

