

- KDM5A/B histone demethylases are amplified and overexpression in multiple solid tumors, making these enzymes ideal targets for cancer therapy;
- KDM5B loss/inhibition induced robust antitumor immune response, leading to prolong survival of tumor bearing mice in multiple models (Figure below);
- Specific inhibitors of KDM5 inhibitors (IC_{50} s of ~ 20 nM) have been identified. 35 high-resolution crystal structures (1.22 - 2.29 Å) of KDM5A with various inhibitors are available to support further medicinal chemistry optimization.

- **Intellectual**

Property: Patent Application Pending

Figure : KDM5B loss (left panel) or KDM5 inhibitor (KDM5i) treatment (right panel) significantly prolonged survival of melanoma bearing mice.

