

## Example Lay Summary

My lab studies \*\*\* because it is expressed by cancer cells, and we believe that it may be important to the ability of cancer cells to grow and to spread to other sites in the body (metastasize). We have recently discovered in tissue culture experiments that treatment of \*\*\*tumor cells with antibodies against \*\*\* results in the suppression of cell growth. Furthermore, simultaneous treatment with drug X already used to treat some of these tumors results in a suppression of tumor growth and works much better than either therapy alone. We now wish to expand these findings to an animal model. To do this, we will inject human tumor cells under the skin of an immune-compromised mouse called a SCID mouse, that foreign tissue can grow in. We will then treat these mice with our \*\*\* and see if the treatments have any impact on tumor growth or spread. If successful, we will continue to study the potential of combining this \*\*\* therapy with other chemotherapeutic drugs.

Some tumors are resistant to targeted therapies because of \*\*\* metabolism. Our study will test inhibitors of \*\*\* metabolism in combination with the targeted cancer therapies to increase their efficacy and/or to overcome drug resistance cancers. In conducting this study, we have carefully weighed the **potential harm to animals against the benefits of the study**. The use of animal models in cancer research is aimed at gaining a deeper understanding of the disease and developing more effective treatments for human patients because XXX. **The potential harm to animals is minimized** through adherence to ethical guidelines, including assessing the animals daily and removing them from the study once they have met scientific goals or have met established humane endpoints. In addition, we use of the **smallest number of animals** necessary to achieve statistically meaningful results and the use of anesthesia and analgesia to minimize pain and distress. We believe that the potential benefits in advancing our understanding of \*\*\* cancer and improving treatment options for human patients justify the careful and responsible use of animal models in this research. Furthermore, many cancer therapies developed initially for the benefit of humans are then utilized in veterinary practice to treat pets with cancer. Therefore, **this research has the potential to benefit both people and animals**.