

➤ Metastatic tumor models

Implantation of tumor cells into the organ of origin (“orthotopically”) allows organotypical interaction between tumor cells and surrounding stroma. In addition, it has been shown that tumor cells can spread to metastatic sites in other organs, with specificities comparable to the human situation. However, it must be emphasized that while in most orthotopically implanted *in vivo* models metastasis can occur it is uncontrolled and heterogeneous.

A liver metastasis model is an alternative way to examine spread of colon cancer specifically to the liver. Cells inoculated via the spleen followed by splenectomy offer an alternative xenograft model for studying colon metastases that involves transit of the cells via the blood stream into the liver.

➤ HCT-116_{luc} cells

HCT-116 is a human colorectal cancer cell line derived from an adult male. It contains a ras mutation in codon 13. The luciferase gene has been added to the cell line to detect and monitor the growth of implanted cells.

➤ *In vivo* bioluminescence measurement

After surgery, the growth of the tumor cells and potential metastatic loci are monitored via *in vivo* bioluminescence imaging (BLI) in Athymic Nude mice.

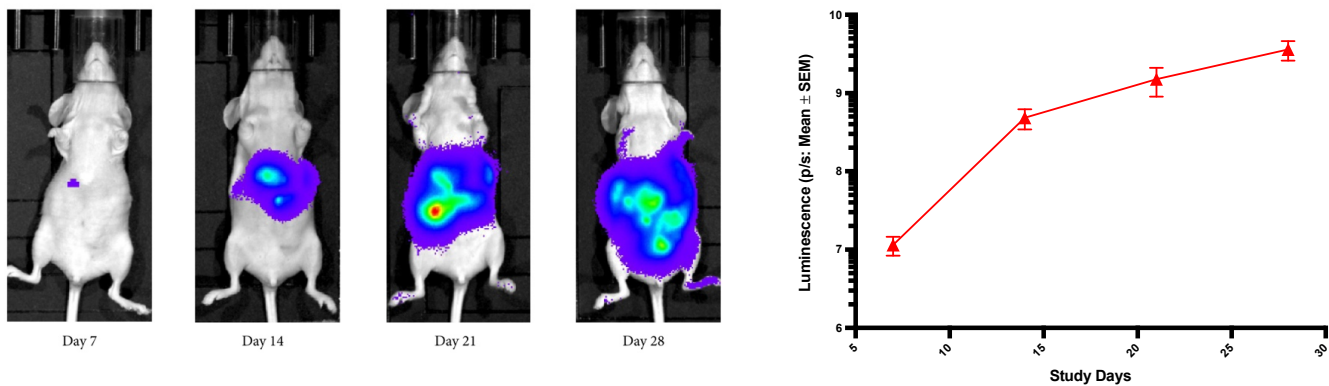


Figure 1: *In vivo* BLI.

Mice with HCT-116_{luc} cells implanted into the liver via the spleen were measured once weekly via BLI for 28 Days.

➤ Study example

If you are interested in receiving information on potential positive controls please reach out to our Business Development team at requests@reactionbiology.com.