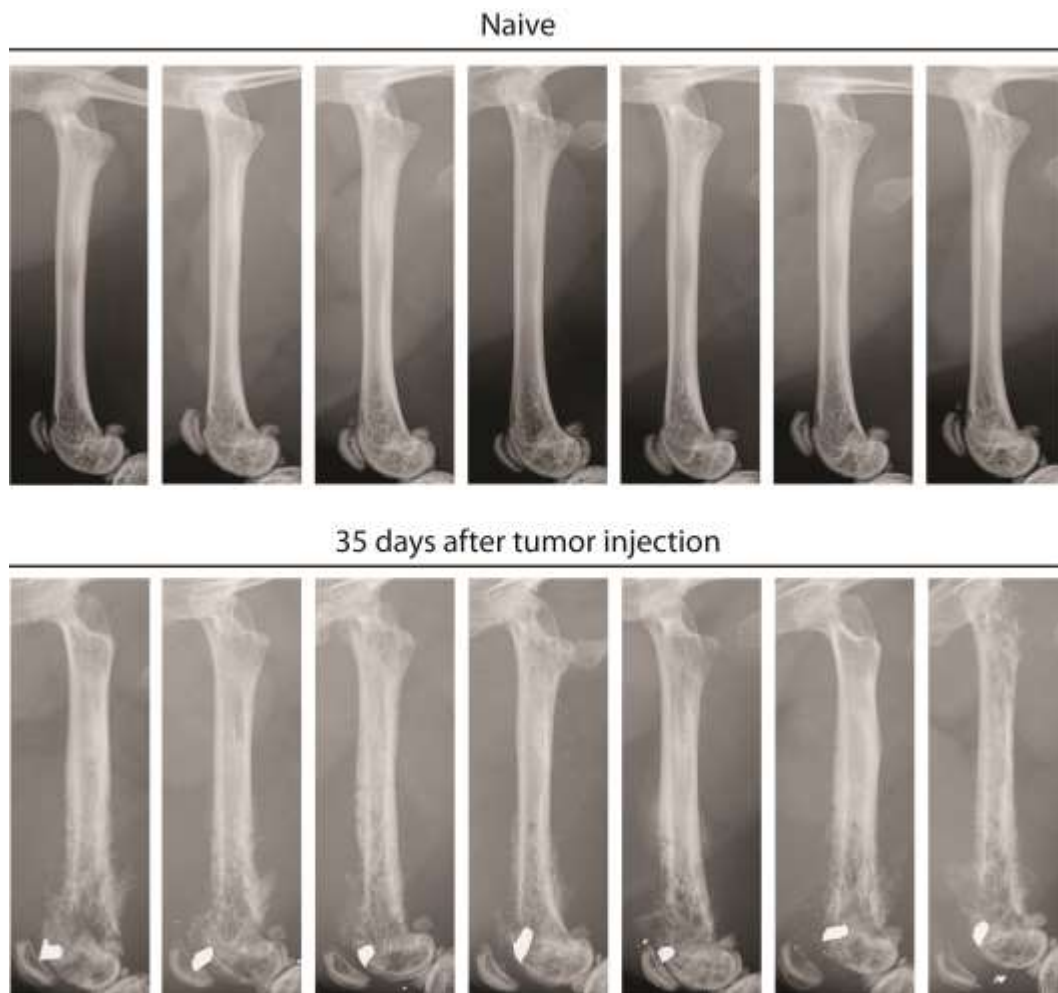
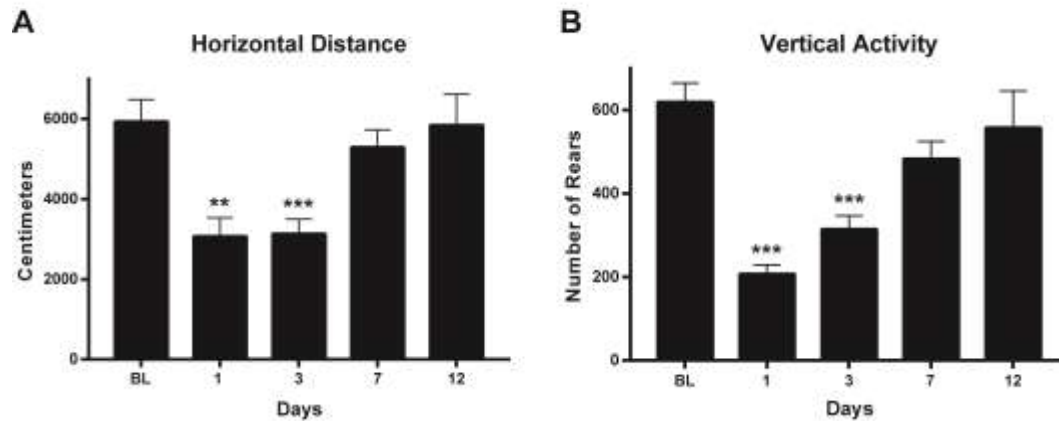


Supplemental Figure 1: Figure showing design of the activity boxes used in the present experiments. The activity boxes used in the present study are 41x41x30cm (length, width and height). Each box contains 2 sets of laser beams, which are 3cm and 8cm in height from the bottom surface of the cage, that detect horizontal activity and rearing episodes, respectively.



Supplemental Figure 2: Representative X-ray images of seven naïve and seven sarcoma bearing femurs at day 35 post-tumor injection. These images show that while there is some heterogeneity between the extent of tumor-induced bone remodeling in the sarcoma bearing group, in terms of bone remodeling, by day 35 post-tumor injection the naïve femur is always clearly distinguishable from the sarcoma bearing femur.

Effect of Surgery Alone on Locomotor Activity



Supplemental Figure 3: Histograms showing that horizontal activity and rearing episodes return to baseline levels 7 days following sham surgery. In measuring sarcoma induced bone pain one question is whether the surgery required to inject and confine the sarcoma cells to the femur itself contributes to the cancer induced bone pain. To address this issue, 10 animals were anesthetized and the identical surgery was performed on these animals (outlined in the materials and methods) with the exception that sarcoma cells were not injected into the intra-femoral space. These data show that by day 7 post-surgery, horizontal activity and vertical rearing episodes had returned to the baseline values observed in naïve animals.