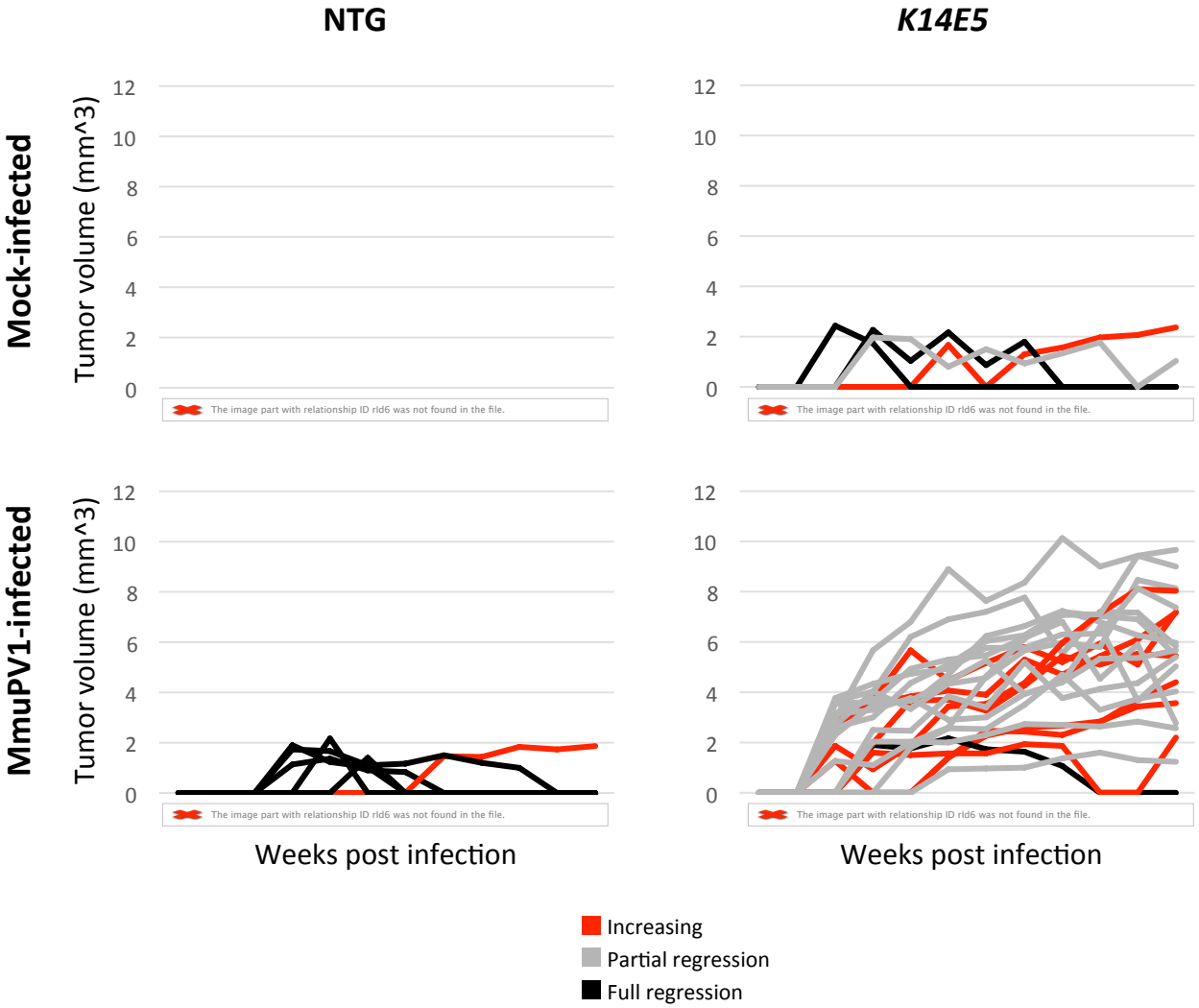
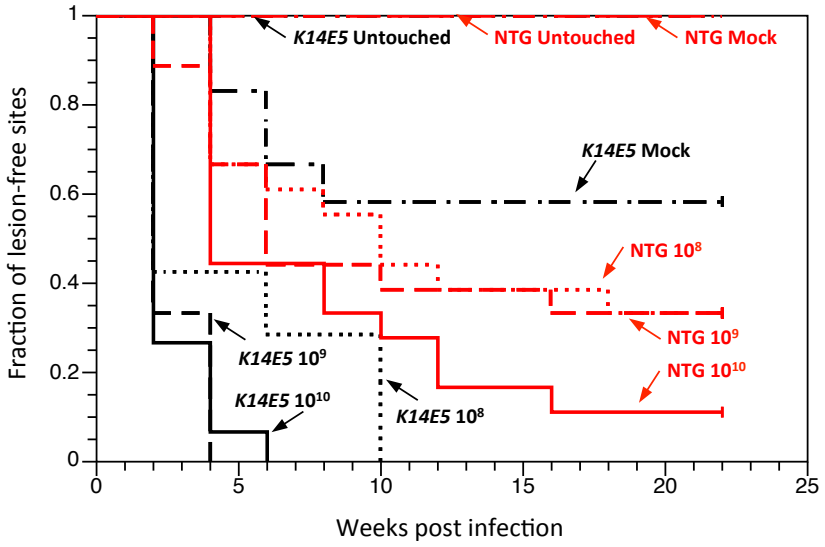
Supplemental Figure 1



Supplemental Figure 1 E5 promotes lesion persistence in MmuPV1-infected mice. Overt lesions that arose in UVB-irradiated, mock-infected and MmuPV1-infected ear and tail sites in nontransgenic and *K14E5* mice were measured bi-weekly over the course of the study and tumor volume was calculated. Each line in these graphs represent the monitoring of growth of an individual lesion over time. Indicated in red are tumors that were still increasing in size at the study endpoint, indicated in gray are tumors that had partially regressed by the study endpoint, and indicated in black are tumors that had completely regressed by the study endpoint. While few overt lesions arose in mock-infected *K14E5* mice and MmuPV1-infected nontransgenic mice, and these lesions remained small in size and a majority of them regressed (see black), many more lesions arose in MmuPV1-infected *K14E5* mice, most of which were larger in size with very few regressing by the study endpoint (see black).

Supplemental Figure 2



Supplemental Figure 2 High doses of MmuPV1 induce lesions in *K14E5* and nontransgenic mice in a dose-dependent manner in the absence of UVB. Non UVB-irradiated *K14E5* and nontransgenic mice were either left untouched, were mock-infected (wounded to induce scarification and topically treated with PBS), or were infected with 10^{10}, 10^{9}, or 10^{8} VGE of MmuPV1 virions. Onset of overt lesions on the ears and tails were monitored every other week over a period of 22 weeks post infection. Within each MmuPV1 dose treatment, *K14E5* mice always displayed significantly earlier onset of lesions than their equally treated nontransgenic mice (*K14E5* vs NTG: 10^{10}, $p<0.001$; 10^{9}, $p<0.001$; 10^{8}, $p<0.005$). Across viral doses, in both *K14E5* and nontransgenic mice, lesions display later onset as the viral dose is decreased, indicating a dose-dependent response to disease time of onset induced by viral infection. While lesions arose in mock-infected *K14E5* mice, no lesions arose in mock-infected nontransgenic mice. All statistical comparisons were performed using a Logrank test.