

Radiotherapy after Neoadjuvant Immunotherapy to Overcome Liver Metastasis Associated Tolerance

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BACKGROUND

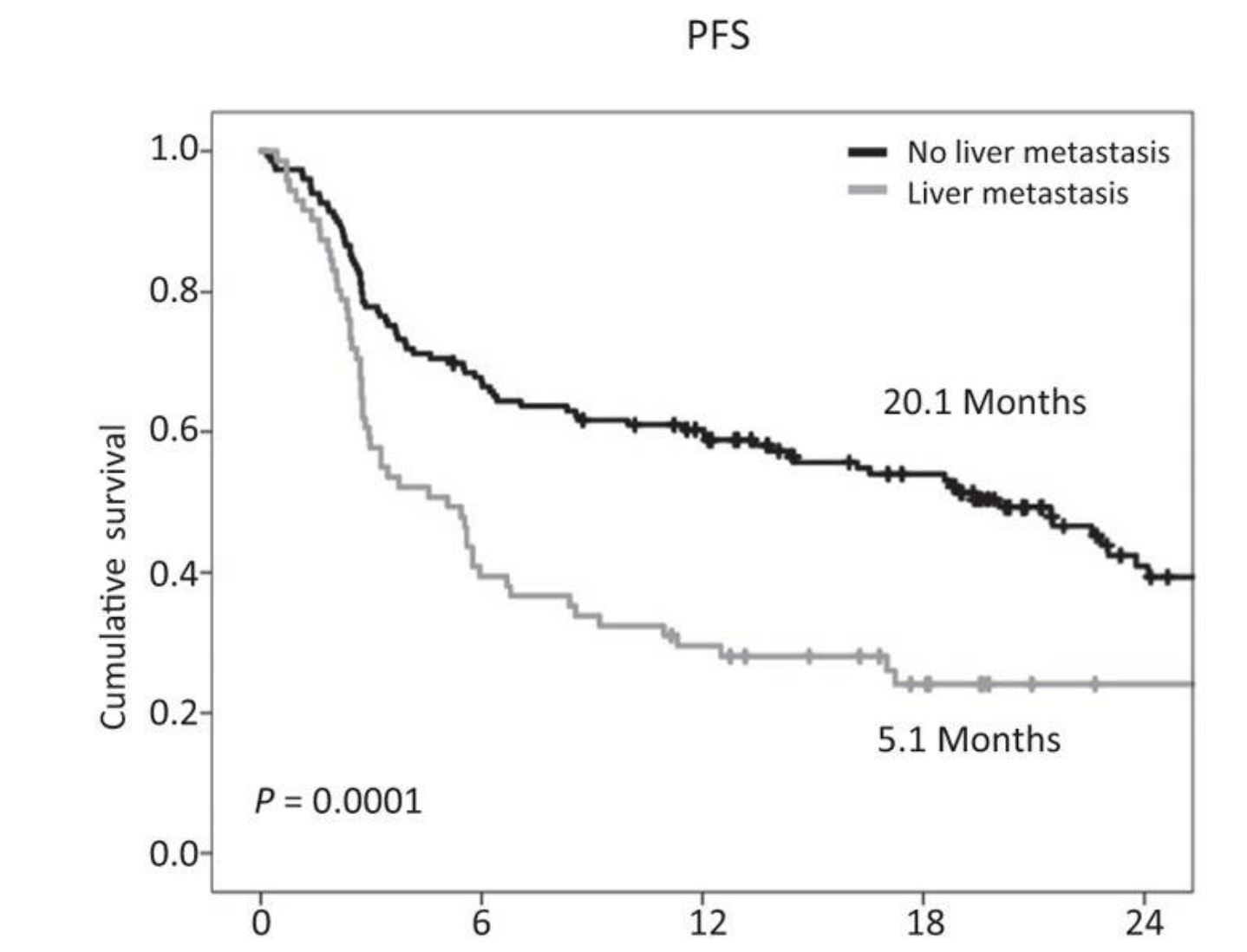
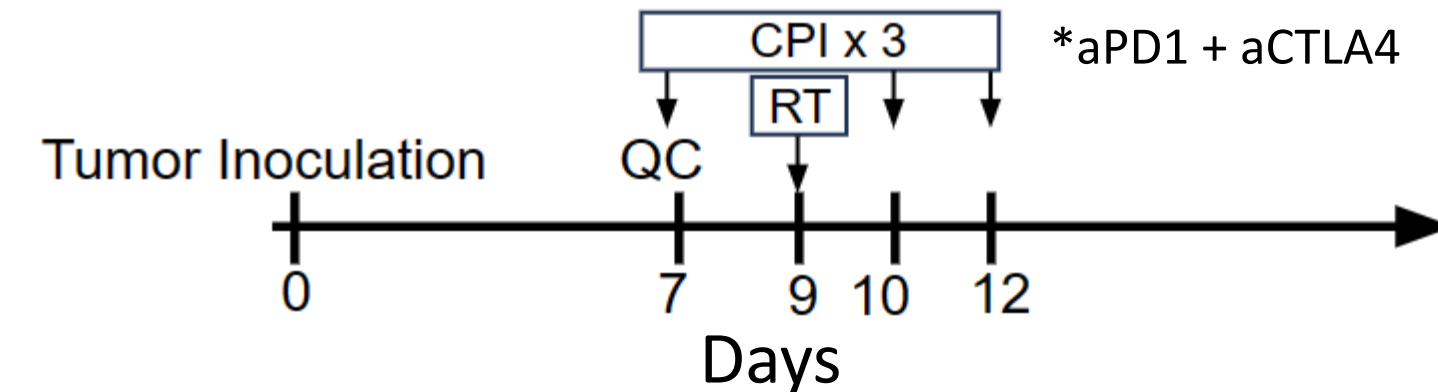


Figure: Progression free survival in patients with melanoma treated with aPD-1
Tumeh PC et al. Liver Metastasis and Treatment Outcome with Anti-PD-1 Monoclonal Antibody in Patients with Melanoma and NSCLC. *Cancer Immunol Res.* 2017;5(5):417-424. doi:10.1158/2326-6066.CIR-16-0325

METHODS



CPI: checkpoint inhibitor
RT: radiotherapy
QC: quality control

RESULTS

For combo CPI therapy:
-RT to liver did NOT induce abscopal response at liver site
-RT to subcutaneous (SQ) site DID induce some abscopal response at liver site

DISCUSSION

RT to the SQ site may be more effective in inducing systemic antitumor immunity, potentially changing the paradigm for treating liver-metastatic melanoma and suggesting skin-specific mechanisms for immune tolerance.

ACKNOWLEDGEMENTS

Support provided by Lee Lab

When used with checkpoint inhibitors, radiotherapy to a subcutaneous tumor, compared to liver tumor, was more effective at inducing an **abscopal** effect in a mouse melanoma model.

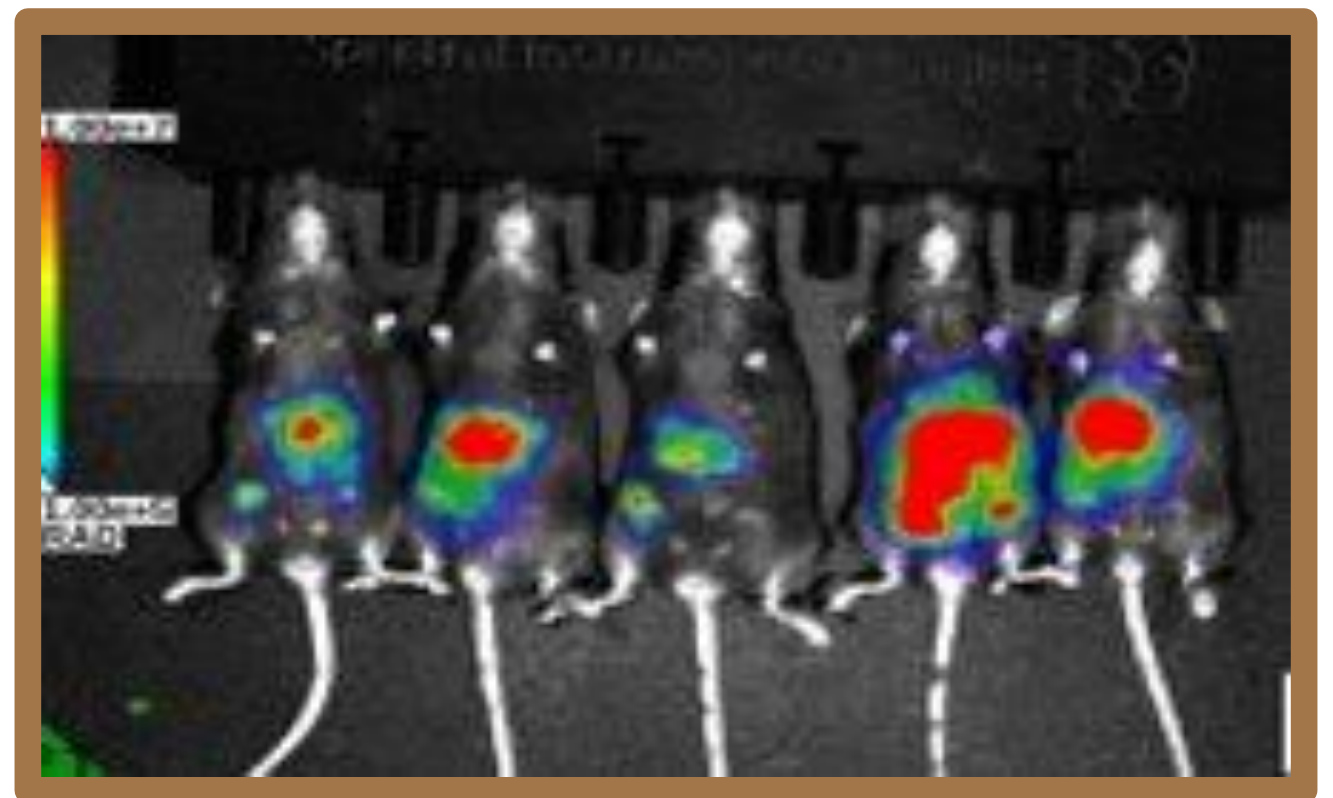
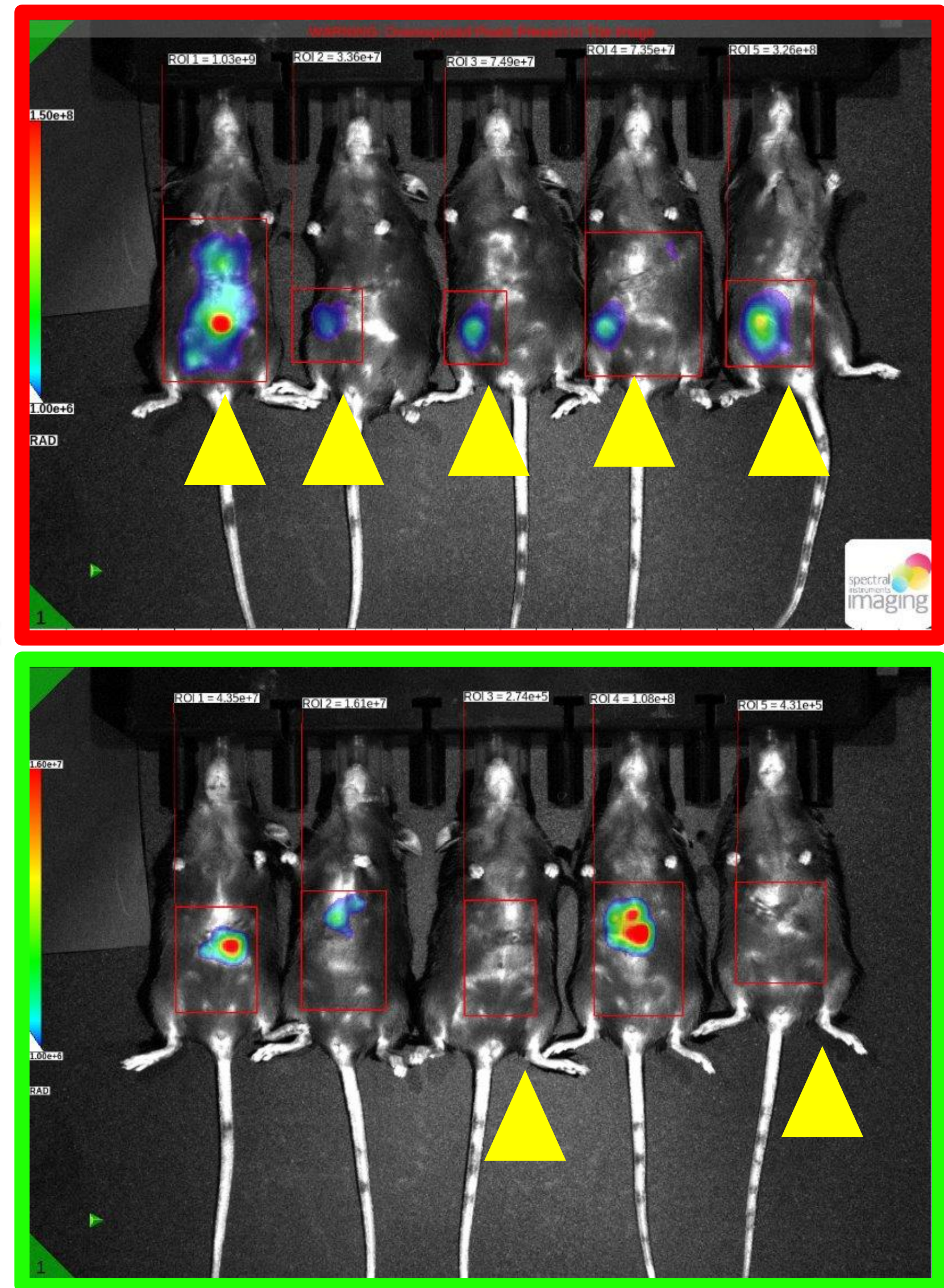
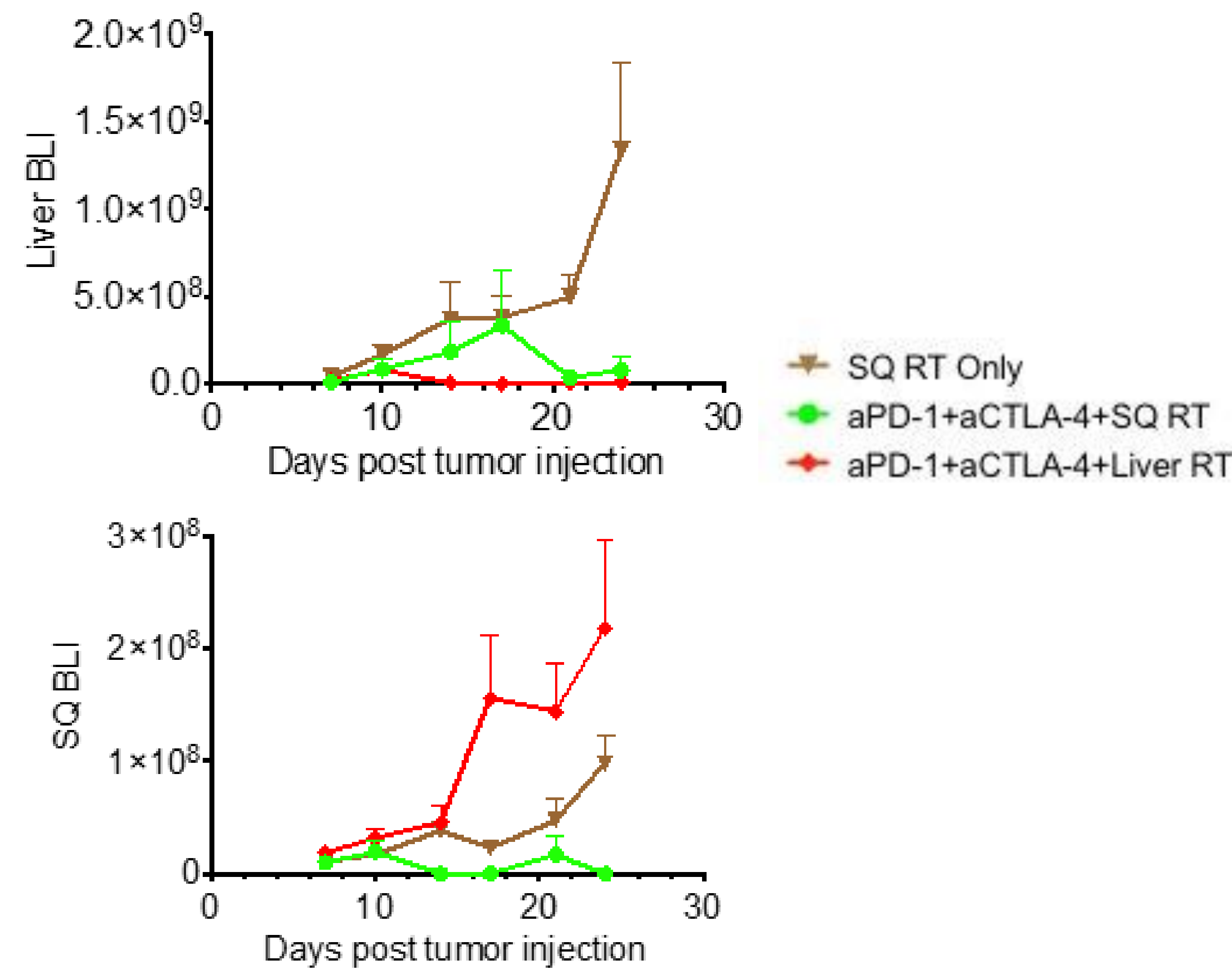


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Our model



Abscopal effect: Radiotherapy at one tumor site may lead to regression of tumor at distant sites that are not irradiated.



Control

