

C3 / Pedal the Cause 2014

"In vivo modeling of anti-tumor responses of human melanoma patients and their responses to checkpoint immunotherapy"

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Abstract:

Melanoma skin cancer is a deadly disease that kills many patients after the cancer spreads. Current therapies are not effective, and many patients have very few treatment options after metastasis occurs. Recently, immunotherapies have been developed to augment immune cell function to kill tumors. Even though these immunotherapies are effective in some patients, many others are nonresponsive. There is therefore a pressing need to predict whether a patient will or will not respond to these drugs so that effective personalized treatment options can be offered. Pedal-funded research will allow scientists to test a patient's immune system against their tumors to determine whether they will have a productive response with clinically available drugs. These studies will be highly significant because if they show promise in melanoma, these tools can be further applied to combat other cancers in humans.