T cells by anti-CD8 mAbs from day 29 onwards, and maintained weekly, as in this model CD8+ T cells are the main hapten responder population. Samples were collected for histology and analyzed by flow cytometry.

Results Our data indicate that despite the depletion of circulating T cells, anti-PD-1 recipients mount a higher initial recall response to contact agents. Higher ear swelling was observed with increased inflammation in these mice. Our data suggest anti-PD-1 can liberate local T cell responses in the absence of a contribution from blood, and may offer a model to test therapeutic interventions to alleviate peripheral immune toxicities.

Conclusions Our results suggest that this murine model of contact hypersensitivity represents a potential model for skin immune checkpoint toxicities. This model of locally-mediated inflammatory recall may advance the goal of uncoupling toxicity from efficacy in patients with immune-related adverse events.

Ethics Approval The animal study was approved by Weill Cornell Medicine’s IACUC; approval number D16-00186.

REFERENCES

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