

Skin dendritic cells in melanoma are key for successful checkpoint blockade therapy

Anastasia Prokopi¹, Christoph H. Tripp¹, Bart Tummers², Florian Hornsteiner¹, Sarah Spoeck¹, Jeremy Chase Crawford², Derek R. Clements³, Mirjana Efremova⁴, Katharina Hutter¹, Lydia Bellmann¹, Giuseppe Cappellano¹, Bruno L. Cadilha⁵, Sebastian Kobold⁵, Louis Boon⁶, Daniela Ortner¹, Zlatko Trajanoski⁴, Suzie Chen⁷, Tanja D. de Gruijl⁸, Juliana Idoyaga³, Douglas R. Green² and Patrizia Stoitzner^{1,*}

- Melanoma progression is accompanied by a decrease in skin cDC2 and upregulation of PD-L1 and Galectin-9 in the tumor microenvironment.
- Responsiveness to checkpoint blockade can be restored by boosting DC function and activation in the tumors.
- Upon DC boost therapy, migratory skin cDC1 and cDC2 can prime melanoma-specific CD8+ T cells in the tumor-draining lymph nodes.

