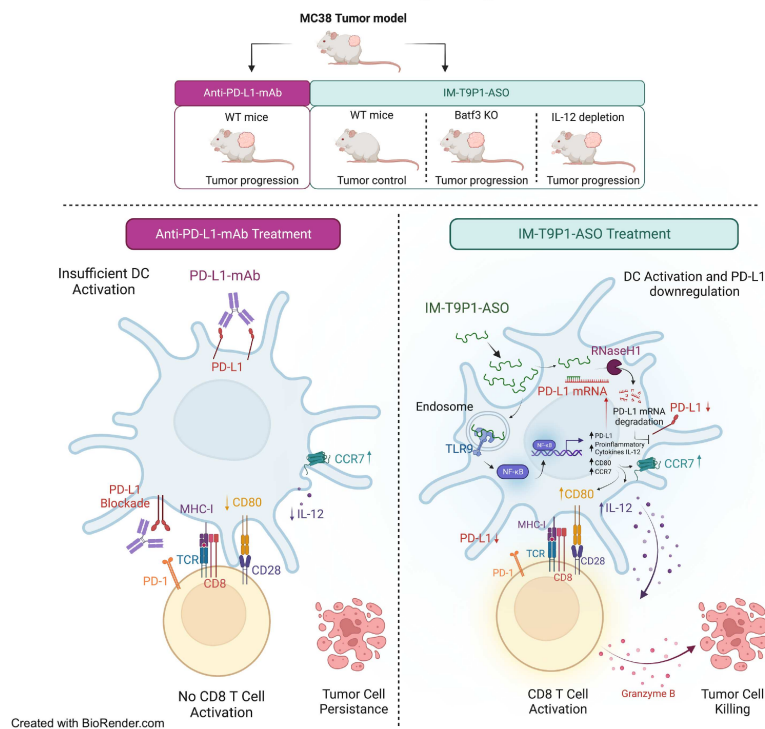


Dual TLR9 and PD-L1 targeting unleashes dendritic cells to induce durable antitumor immunity



Authors

Laura Fernandez-Rodriguez[†], Chiara Cianciaruso[†], Ruben Bill, Marcel P Trefny, Richard Klar, Nicole Kirchhammer, Melanie Buchi, Julia Festag, Sven Michel, Rainer H Kohler, Elham Jones, Andre Maaske, Abhishek S Kashyap, Frank Jaschinski, Karen O Dixon, Mikael J Pittet[‡], and Alfred Zippelius[‡]

[†]These authors contributed equally to this work

[‡]These authors contributed equally to this work

Correspondence

Alfred.Zippelius@usb.ch

Mikael.Pittet@unige.ch

In Brief

This study reports a PD-L1-targeting antisense oligonucleotide with TLR9 agonistic capacity that stimulates intratumoral DC3s while modulating their PD-L1 expression, thereby inducing long-lasting tumor control in multiple mouse tumor models. It also shows important mechanisms in DC activation to overcome resistance to PD-L1 monoclonal antibodies, providing a roadmap for the application of these findings to the treatment of human cancer.