
© photo: Koch Institute at MIT


Stefani Spranger MIT, Cambridge, USA

## Not all anti-tumor $T$ cell responses are generated equal

Cancer immunotherapies, first and foremost checkpoint blockade therapy (CBT), have revolutionized the treatment landscape of cancer patients, however, to date long-term clinical benefit is restricted to a minority of cancer patient. Responses to immunotherapy have been correlated to the presence of cytotoxic T cells within the tumor microenvironment and to the fact that these tumor-reactive killer cells have lost the functional ability to eliminate tumor cells. This terminal state of T cell differentiation is often referred to as T cell exhaustion and CBT agents can reinvigorate such exhausted T cell responses. More recently it has been appreciated that not all T cell responses follow this path of differentiation and are therefore resistant to reinvigoration by current CBT agents. We have generated mouse models which allow to study different types of T cell responses to cancer and focus particularly on the very early stages of $T$ cell activation in the tumor-draining lymph node.

## Host: Marina Rodnina

