

# New cell therapy cures metastatic cancer in mouse

The RESURRECT innovation includes cell therapies (NK or T cell based) that overcome the immunosuppressive tumor microenvironment and thus retain their full cytotoxic activity. The cells show strong, fast-acting cytotoxicity against both primary cancer and metastatic cells. The inventive RESURRECT concept effectively cures metastasis in different cancer mouse models including melanoma, colorectal cancer and pancreatic cancer.



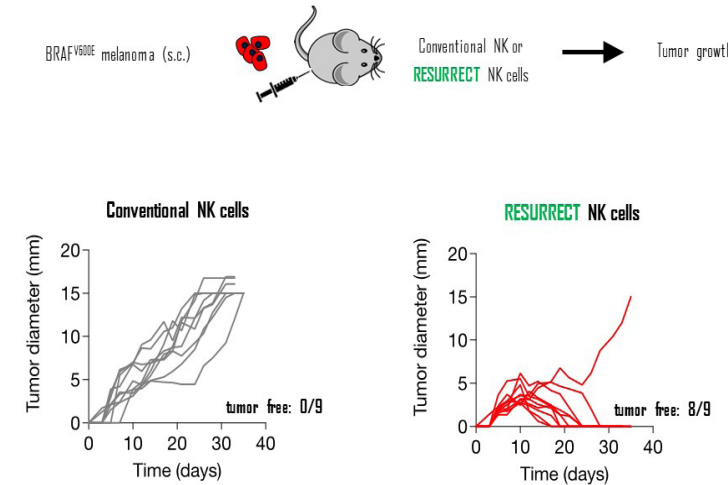
## Allogeneic, off-the-shelf use possible

The mechanism of action targeted by the inventive RESURRECT cells is conserved from mouse to human cancers. A strong advantage is that the RESURRECT cell therapies can be used in an allogeneic setting, allowing their off-the-shelf use as future cancer drug components.

- 01 RESURRECT NK cells are much more effective than standard cell therapies and overcome immunosuppressive tumor microenvironments
- 02 RESURRECT cells act against primary tumors and metastases
- 03 Successfully tested in melanoma, colorectal and pancreatic cancer models, and in human cell culture
- 04 Product ideas: metastasis therapeutic and/or metastasis prevention for tumor patients

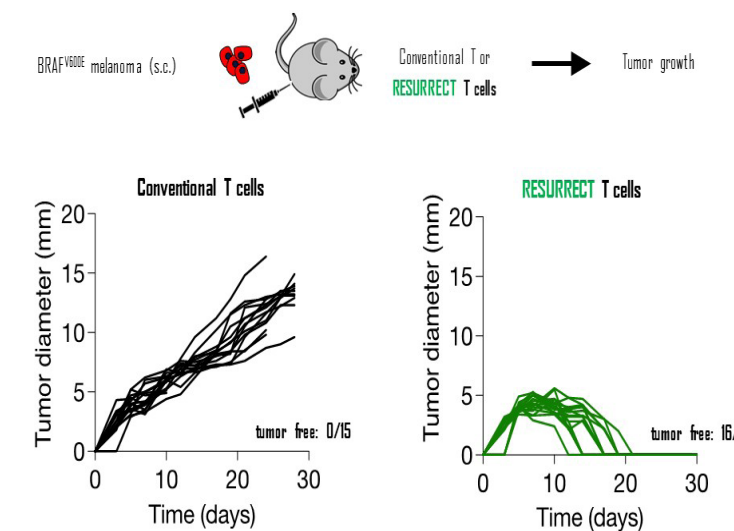


RESURRECT NK cells efficiently eliminate primary melanoma tumors



**Tumor growth of aggressive melanoma transplanted into the skin (subcutaneously) of wildtype mice with conventional NK cells or mice with RESURRECT NK cells**

RESURRECT T cells efficiently eliminate primary melanoma tumors



**Tumor growth of aggressive melanoma transplanted into the skin (subcutaneously) of wildtype mice with conventional cytotoxic CD8+ T cells or mice with RESURRECT cytotoxic CD8+ T cells**

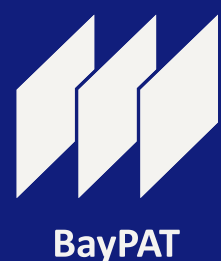
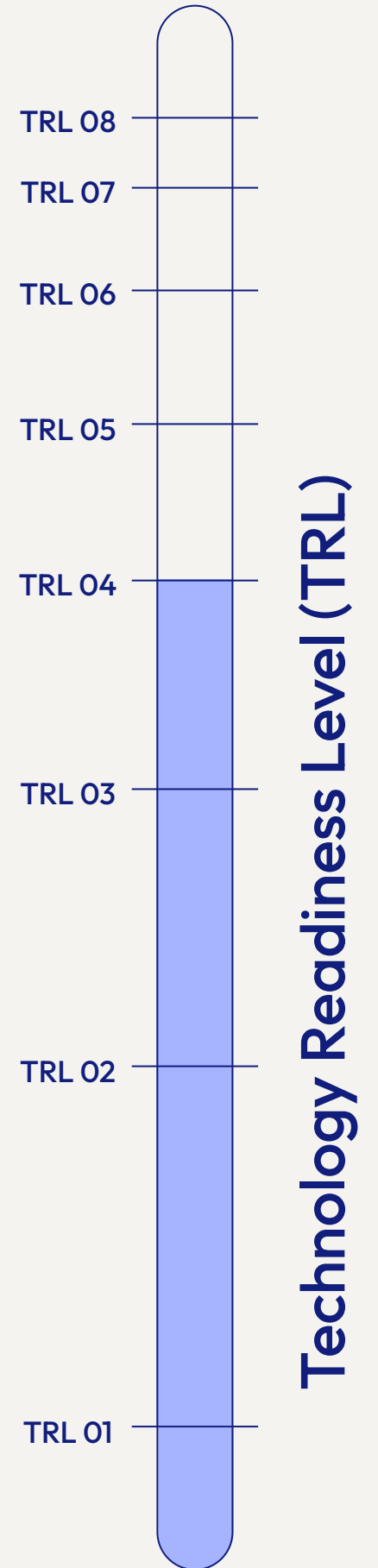
## CHALLENGE

Metastatic cancer is responsible for the majority of cancer-related deaths. Surgery and subsequent radio- or chemotherapies often fail to remove all cancer cells that have started to form metastases in different organs of the body. Metastases frequently develop immunosuppressive resistance mechanisms protecting them from immunotherapies that work well for primary tumors. So far, specific treatment options for metastatic cancers are very limited.

## INNOVATION

The inventors first developed the RESURRECT NK cell therapy based on NK cells. NK cells are fast-acting natural killer cells that directly kill tumor cells and simultaneously induce a multicellular immune response against tumors. NK cells have been shown to be generally safe for patients and well-tolerated in cancer immunotherapy. By now, the RESURRECT concept has been successfully extended to T cells (tumor-specific and CAR-T) and has been broadly validated in mouse models. Its effectiveness is significantly higher than that of standard cell therapies.

01 Basic principles observed · 02 Technology concept formulated · 03 Experimental proof of concept · 04 Technology validated in lab · 05 Technology validated in relevant environment · 06 Technology demonstrated in relevant environment · 07 System prototype demonstration in operational environment · 08 System complete and qualified



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