

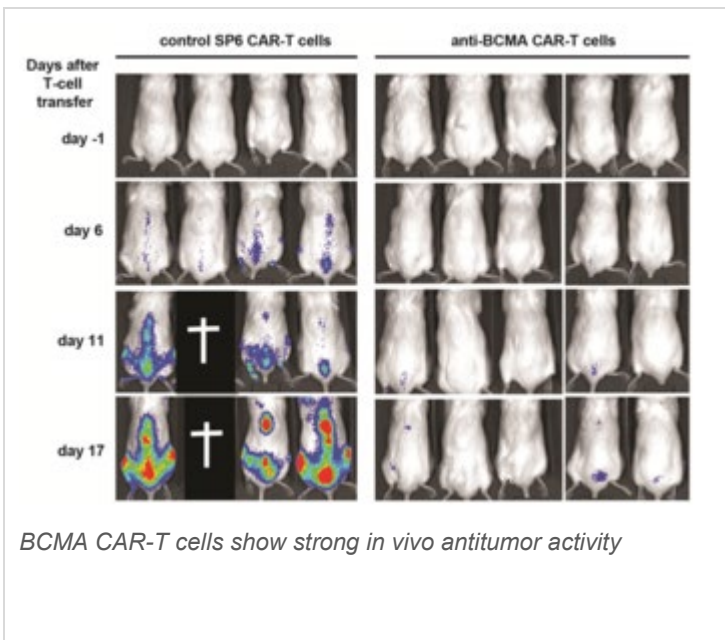


**REFERENCE NUMBER
TO 03-00417**

NOVEL BCMA-CAR FOR THE TREATMENT OF MULTIPLE MYELOMA AND NON-HODGKIN LYMPHOMA (NHL)

CHALLENGE

In recent years, BCMA has emerged as an attractive target to treat multiple myeloma (MM). Since BCMA expression is mostly restricted to plasma cells, it is also an exciting target for CAR-T therapy. MM cell lines show an elevated level of BCMA and new findings indicate that BCMA is also expressed in very low levels on other lymphoma B cells.



TECHNOLOGY DESCRIPTION

The present BCMA-CAR is based upon a proprietary humanized BCMA antibody with an exceptionally high affinity towards BCMA. Detailed structural knowledge about the binding interface facilitated construction of this very specific CAR which has promising potential for the treatment of MM and beyond. In contrast to other BCMA-CAR's reported so far, this CAR construct is fully humanized. The BCMA-CAR is able to kill effectively different MM and non-Hodgkin lymphoma B cell lines (B-NHL), expressing very low levels of BCMA. Testing in MM and B-NHL xenograft mouse models showed strong in-vivo antitumor activity. This is an exciting feature differentiating this CAR from other approaches targeting BCMA. Apart from the treatment of MM and B-NHL, this CAR may also represent an additional treatment option for NHL patients who have acquired a CD19 negative B-cell phenotype leading to immune escape from anti-CD19 antibody and CD19 CAR-T cell therapy.

COMMERCIAL OPPORTUNITY

Available for licensing or preferentially co-development

PATENT SITUATION

PCT patent application pending: PCT/EP2017/063862 (priority from June 2016)

