ADVANCES IN CAR T-CELL TREATMENT

L.W. Kwak, Duarte, CA (USA), et al.

NOVEL BAFF-R CAR T-CELL THERAPY FOR CD19 ANTIGEN-LOSS RELAPSED B CELL TUMORS

Authors Conclusion from the abstract: Taken together, our data suggest that BAFF-R is amenable to CAR T-cell therapy and that targeting it may add to existing alternative strategies to overcome relapse from CD19 antigen loss, such as CD22 CAR T cells. Future strategies combining dual targeting of CD19 and BAFF-R may also be effective.

C.L. Batlevi, New York, NY (USA), et al.

PHASE I CLINICAL TRIAL OF CD19-TARGETED 19-28Z/4- 1BBL "ARMORED" CAR T CELLS IN PATIENTS WITH RELAPSED OR REFRACTORY NHL AND CLL INCLUDING RICHTER TRANSFORMATION

Authors Conclusion from the abstract: Treatment with 19-28z/4-1BBL armored CAR T cells is safe with no severe CRS. Grade 3 neurotoxicity was noted in 3 pt (11%) with no case of cerebral edema. The overall CR rate is 57% with 8 patients remaining in CR at the time of this report. Future studies are

warranted to develop and improve on existing CAR T cell therapies.

C.A. Ramos, Houston, TX (USA), et al.

<u>CD30-CHIMERIC ANTIGEN RECEPTOR (CAR) T CELLS FOR THERAPY OF HODGKIN</u> LYMPHOMA (HL)

Authors Conclusion from the abstract: Twelve patients have been evaluated at 6 weeks after infusion. Seven have had a CR lasting up to >15 months, 1 had a partial response, and 4 had disease progression. In 2 patients who relapsed after CR and were re-biopsied, immunohistochemistry evidenced persistent tumor expression of CD30. Hence, infusion of CD30.CARTs after cytoreductive chemotherapy is well tolerated at the doses used. Inclusion of cytoreduction pre-infusion substantially improves CD30.CART expansion and appears associated with superior anti-tumor activity in relapsed patients.

J. Gauthier, Seattle, WA (USA), et al.

DURABLE RESPONSES AFTER CD19-TARGETED CAR-T CELL IMMUNOTHERAPY WITH CONCURRENT IBRUTINIB FOR CLL AFTER PRIOR IBRUTINIB FAILURE

Authors Conclusion from the abstract: In conclusion, CD19 CAR-T cell therapy with concurrent ibrutinib for R/R CLL was feasible and led to high rates of durable responses, without ≥ grade 3 CRS.

A.V. Hirayama, Seattle, WA (USA), et al.

HIGH RATE OF DURABLE COMPLETE REMISSION IN FOLLICULAR LYMPHOMA AFTER CD19 CAR-T CELL IMMUNOTHERAPY

Authors Conclusion from the abstract: CD19 CAR-T cell immunotherapy is highly effective in adults with clinically aggressive R/R FL, with durable CR in a high proportion of FL pts.

T. Siddiqi, Duarte, CA (USA), et al.

SAFETY OF LISOCABTAGENE MARALEUCEL GIVEN WITH DURVALUMAB IN PATIENTS
WITH RELAPSED/ REFRACTORY AGGRESSIVE B-CELL NON-HODGKIN LYMPHOMA: FIRST
RESULTS FROM THE PLATFORM STUDY

Authors Conclusion from the abstract: Based on preliminary results, the combination of liso-cel with durvalumab has an acceptable safety profile. No CRS was observed after initiation of durvalumab. Preliminary data suggest CAR T cells persist and/or increase with combination treatment, warranting further clinical evaluation. Updated data will be presented.