Background and Aim

BASECAMP-1: An observational study of patients with colorectal cancer, lung cancer, or pancreatic cancer to identify patients with high risk of relapse for incurable disease. No interventional therapy will be administered on this study.

METHODS

BASECAMP-1 is a non-interventional, observational study to evaluate patients with solid tumors with a high risk of relapse for incurable disease. No interventional therapy will be administered on this study. Participants will be screened for HLA typing and, based on results, participants will have archived tumor leukapheresis for future CAR T-cell therapy.

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RESULTS

Approximately 13% of all cancer patients have tumors with permanent clonal heterozygous loss of HLA, enabling access to different tumor types (up to 33% in PANCs). HLA antigens are ideal blocker targets for a Tmod T-cell therapy that protects normal cells. The blocker domain is derived from leukocyte immunoglobulin-like receptor, which is a class I MHC ligand binding domain.

In previous studies, the CAR T cells or Tmod CAR T cells were administered via tail veins when tumor reached 100-150 mm3. In vivo studies show that Tmod maintains selectivity, while leaving healthy cells intact.

Additional results on both the CEA and MSLN Tmod CAR T-cells are reported in Figure 3. Compared with CEA CAR T-cells, Tmod CAR T-cells were administered via tail veins when tumor reached 100-150 mm3. Mice treated with CEA CAR T cells (shown in green) experienced regressions of both tumor and normal grafts. Mice treated with Tmod CAR T cells (shown in yellow) experienced selective regression of tumor grafts, while "normal" tumor grafts continued to grow.

Figure 3: CEA T-cell administration.

Figure 4: Tumor Lysis and Cytotoxicity Assay.

Figure 5: Neoantigen-Defined T-cell Activity.

Figure 6A: Patient and Tissue Flow From the BASECAMP-1 to EVEREST Studies.

Figure 6B: Study Schedules.

Figure 7: T-cell administration.

Figure 8: Tumor Lysis and Cytotoxicity Assay.

Figure 9: Neoantigen-Defined T-cell Activity.

Figure 10: Patient and Tissue Flow From the BASECAMP-1 to EVEREST Studies.

Figure 11: Study Schedules.

Figure 12: T-cell administration.

Figure 13: Tumor Lysis and Cytotoxicity Assay.

Figure 14: Neoantigen-Defined T-cell Activity.

Figure 15: Patient and Tissue Flow From the BASECAMP-1 to EVEREST Studies.

Figure 16: Study Schedules.

Figure 17: T-cell administration.

Figure 18: Tumor Lysis and Cytotoxicity Assay.

Figure 19: Neoantigen-Defined T-cell Activity.

Figure 20: Patient and Tissue Flow From the BASECAMP-1 to EVEREST Studies.

Figure 21: Study Schedules.

Figure 22: T-cell administration.

Figure 23: Tumor Lysis and Cytotoxicity Assay.

Figure 24: Neoantigen-Defined T-cell Activity.