CAR T-cell Clinical Research Trials Available for Multiple Myeloma, Non-Hodgkin's Lymphoma, Small Lymphocytic Lymphoma and Chronic Lymphocytic Leukemia

Disease	Trial Number	Name of Trial	Drug & NCT Identifier
CLL/Small Lymphocytic Lymphoma	NSH1226	An Open-Label, Phase 1 Safety and Phase 2 Randomized Study of JCAR017 in Subjects with Relapsed or Refractory Chronic Lymphocytic Leukemia or Small Lymphocytic Lymphoma	JCAR017 NCT03331198
Multiple Myeloma	NSH1216	A Phase 3, Multicenter, Randomized, Open-Label Study to Compare the Efficacy and Safety of bb2121 versus Standard Triplet Regimens in Subjects with Relapsed and Refractory Multiple Myeloma (rrMM) (KarMMa-3)	bb2121 NCT03651128
NHL	NSH1170	A Phase 1, Multicenter, Open-Label Study of JCAR017, CD19-Targeted Chimeric Antigen Receptor (CAR) T-Cells, in Relapsed and Refractory (R/R) B-Cell Non-Hodgkin Lymphoma	JCAR017 NCT02631044
	NSH1207	A Global Randomized, Multicenter Phase 3 Trial to Compare the Efficacy and Safety of JCAR017 to Standard of Care in Adult Subjects with High-Risk, Transplant-Eligible Relapsed or Refractory Aggressive B-Cell Non-Hodgkin Lymphomas (TRANSFORM)	JCAR017 NCT03575351
	NSH1230	A Phase 2 Study of Lisocabtagene Maraleucel (JCAR017) as Second-Line Therapy in Adult Patients with Aggressive B-Cell NHL	JCAR017 NCT03483103

NSH1226

Inclusion Criteria
- Age ≥ 18
- ECOG PS ≤ 1
- CLL with clinically measurable disease
- SLL with clinically measurable disease

Exclusion Criteria
- Known active CNS disease
- History of another primary malignancy <2 yrs
- Richter's transformation

NSH1216

Inclusion Criteria
- Age ≥ 18
- ECOG PS 0 or 1
- Received 2 - 4 prior MM regimens
- Received prior treatment with daratumumab, a proteasome inhibitor and an immunomodulatory compound containing regimen for at least 2 consecutive cycles
- Refractory to the last treatment regimen
- Achieved at least a minimal response to at least 1 prior treatment regimen
- Has received and failed Bruton tyrosine kinase inhibitor (BTKi) treatment or is ineligible for BTKi treatment.

Exclusion Criteria
- Active or history of plasma cell leukemia, WM, POEMS syndrome, or amyloidosis
- COPD with FEV1 50% of predicted normal
- Therapy-based therapeutic for cancer, investigational cellular therapy for cancer, or BCMA targeted therapy
- Received an autologous stem cell transplant within 12 wks prior to randomization

NSH1170

Inclusion Criteria
- Age ≥ 18 years
- ECOG PS between 0 and 1
- Relapsed or refractory B-cell NHL or Mantle Cell Lymphoma (MCL)
- Previous treatment of at least 2 lines of therapy or 1 line in MCL or after auto HSCT
- Archived tumor biopsy tissue available from the last relapse and corresponding pathology report available for disease confirmation, and willing to undergo pre- and post-treatment biopsy if at least one tumor-involved site is deemed accessible at time of screening

Exclusion Criteria
- CNS only involvement with malignancy-secondary CNS involvement are allowed on study
- Active acute or chronic GVHD
- Prior malignancy <2 yrs
- Active hepatitis B, hepatitis C, or HIV

NSH1207

Inclusion Criteria
- Age ≥18 and ≤ 75 at time of consent
- ECOG PS ≤ 1
- Relapsed or refractory B-cell NHL
- Refractory (SD,PD,PR, or CR with relapse before 3 months) or relapsed (CR with relapse on or after 3 months) within 12 months from CD20 antibody and anthracycline containing first line therapy
- Must have PET positive lesion(s) at screening
- Enough tumor material must be available for confirmatory by central pathology
- Secondary CNS involvement is acceptable

Exclusion Criteria
- Not eligible for HSCT
- Previous CD-19 targeted therapy
- Planned allo HSCT
- Prior malignancy resolved < 2yrs
- Treatment with prior gene therapy
- History/active hepatitis B, hepatitis C or HIV

NSH1230

Inclusion Criteria
- Age ≥ 18
- ECOG PS 0-2
- Diagnosis:
  - DLBCL NOS or transformed from follicular lymphoma
  - High grade B-Cell lymphoma with MYC and BCL and/or BCL6 rearrangements with DLBCL histology (double/triple hit lymphoma [DHL/THL])
  - Follicular lymphoma Grade 3B
- Previous treatment must include single line of chemoimmunotherapy containing an anthracycline and a CD20 targeted agent
- Subjects must be deemed ineligible for both high-dose chemotherapy and HSCT while also having adequate organ function for CAR T-cell treatment

Exclusion Criteria
- Subjects with central nervous system (CNS)-only involvement by malignancy (subjects with secondary CNS involvement are allowed on study)
- Previous CD-19 targeted therapy and or prior HSCT