CAR-HRSMM

HR Smoldering Multiple Myeloma, CAR-HiRiSMM

Cilta-Cel en HR-SMM

Number of patients = **20 pts**

Endpoints

- **Primary:**
  - To assess the both short-term and long-term **safety and tolerability** of cilta-cel in high risk SMM
  - Proportion of patients with undetectable **MRD rate at 6 months, 12 months,** and thereafter every 12 months **up to 5 years** after cilta-cel administration
- **Secondary:**
  - Analyse the **overall response rates** as well the different response categories: VGPR, PR, CR and sCR.
  - Assess **mass spectrometry** quantification of M-protein to be correlated with the conventional responses as well as MRD testing.
  - Evaluate the immunogenicity of cilta-cel

HR Smoldering Multiple Myeloma, CAR-HiRiSMM

Inclusion Criteria

High risk SMM defined as having 1 of the following 3 criteria:

1. **High risk per "20-2-20" criteria defined as presence of any 2 of the following:**
   a) Serum M spike > 2 gm/dL
   b) Involved to uninvolved FLC ratio > 20
   c) Bone marrow plasma cell % > 20%

   OR

2. **Total score of ³9 using the following scoring system**
   - FLC Ratio
     - >10-25 = 2
     - >25-40 = 3
     - >40 = 5
   - Serum M Protein (g/dL)
     - >1.5-3 = 3
     - >3 = 4
   - BMPC%
     - >15-20 = 2
     - >20-30 = 3
     - >30-40 = 5
     - >40 = 6
   - fluorescence in situ hybridization (FISH) abnormality (t(4,14), t(14,16), 1q gain, or del13q = 2

   OR

3. **Presence of ≥95% of BMPC with an aberrant phenotype** within the BMPC compartment and reduction of at least 25% below the lower normal limit for ≥1 uninvolved immunoglobulin isotype. (Only IgG; IgA and IgM will be considered)

HR Smoldering Multiple Myeloma, CAR-HiRiSMM

Inclusion Criteria

- ECOG ≤1
- Have an estimated glomerular filtration rate (eGFR) ≥40 mL/min during the screening period.
- Laboratory values obtained <21 days prior to registration:
  - Total bilirubin ≤ 2.0 mg/dL
  - Aspartate transaminase (AST) ≤ 3 x upper limit of normal (ULN)
  - Alanine transaminase (ALT) ≤ 3 x upper limit of normal (ULN)
  - Hemoglobin ≥ 8.0 g/dL (≥5 mmol/L) (without prior red blood cell [RBC] transfusion within 7 days before the laboratory test; recombinant human erythropoietin use is permitted).
  - Neutrophils ≥ 1.0 x 109/L (prior growth factor support is permitted but must be without support in the 7 days prior to the laboratory test)
  - Platelets ≥ 75 x 109/L (must be without transfusion support in the 7 days prior to the laboratory test)
  - Lymphocyte count ≥0.3 x 109/L

HR Smoldering Multiple Myeloma, CAR-HiRiSMM

List of participating sites	Location
Clínica Universidad de Navarra	Pamplona/Madrid
Hospital Universitario de Salamanca	Salamanca
Hospital Universitario 12 de octubre	Madrid
Hospital Clinic de Barcelona	Barcelona
Hospital German Trias i Pujol	Badalona-Barcelona
Hospital Virgen del Rocío	Sevilla
Complejo Hospitalario Universitario de Santiago	Santiago de Compostela
Back up site	
Hospital Universitario Marqués de Valdecilla	Santander