

What is claimed is:

1. Use of CD19 CAR-T cells in the preparation of a medicament for a subject having a haematological cancer comprising CD19 expressing cancer cells, wherein the subject is characterised by having a baseline Sum of Product Diameters of Index Lesions (SPD) value in one of 4 ranges,
wherein the four ranges comprise the following:
 - range 1, from about 100 mm² to about 2000 mm²;
 - range 2, from more than 2000 mm² to about 3700 mm²;
 - range 3, from more than 3700 mm² to about 6700 mm²; and
 - range 4 from more than 6700 to about 24,000 mm²,
 whereby the lower the range in which the SPD falls the higher the likelihood of response to CD19 CAR-T treatment and wherein a subject with an SPD in range 3 has the highest likelihood of Grade ≥ 3 cytokine release syndrome (CRS) after CD19 CAR-T treatment is administered, and a subject with an SPD in range 2 has the highest likelihood of Grade ≥ 3 neurologic events after CD19 CAR-T treatment is administered.
2. The use according to claim 1 wherein the cancer is relapsed/refractory diffuse large B cell lymphoma.
3. The use according to claim 1 or 2 wherein the CD19 CAR-T medicament is axicabtagene ciloleucel (Yescarta), tisagenlecleucel (Kymriah), JCAR017, JCAR015, JCAR014, Uppsala U. anti-CD19 CAR (NCT02132624), or UCART19.
4. The use of any one of claims 1-3, wherein the subject is ≥ 65 years old.
5. The use of any one of claims 1-3, wherein the subject is < 65 years old.
6. The use of any one of claims 1-5, wherein the CD19 CAR-T treatment is to be administered as first line therapy.