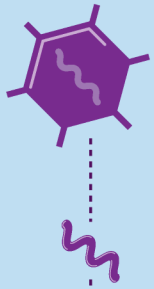
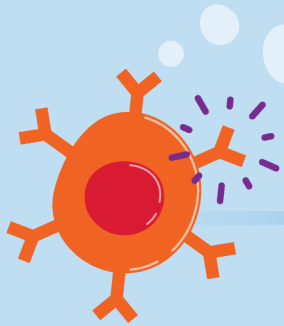
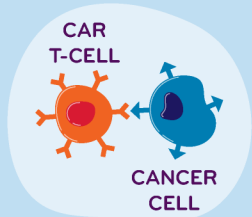
CAR T-Cell Cancer Therapy



2 REPROGRAMMING

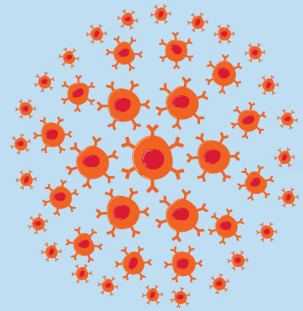
The T-cells are reprogrammed by introducing a genetic sequence through a lentiviral vector so the T-cells produce new surface receptors (called CARs).





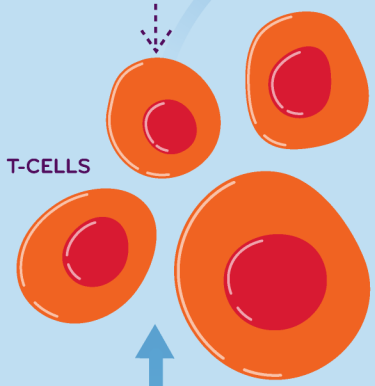
3 CAR T-CELLS

CAR T-cells can now recognise and attach to specific marker proteins on the cancer cells – signalling their destruction.



4 EXPANSION

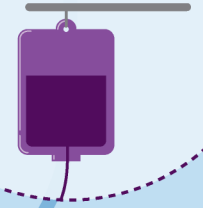
The CAR T-cells are then 'expanded' in the lab to create millions of copies.

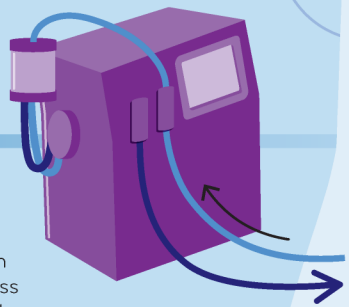


21 DAYS

5 CONDITIONING

Before the CAR T-cells are reintroduced, the patient receives low-dose chemotherapy.



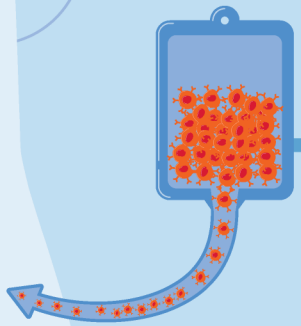


1 SEPARATION

White blood cells are drawn from the patient in a process called 'leukapheresis'. T-cells are then separated in the lab.

7 MONITORING

After treatment, the patient is monitored so any side effects can be managed promptly.



6 ADMINISTRATION

CAR T-cells are infused back into the patient.

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