Chimeric Antigen Receptor T cell (CAR T) therapy: How it works

At the infusion centre, the modified CAR T

cells are administered to the same patient via a single intravenous infusion following

a few days of chemotherapy designed to

the patient's immune reaction to them

accommodate the new cells and minimise

CAR T therapy aims to use the body's own immune system to fight certain types of blood cancer.1 A patient's T cells are collected and modified outside of the body to recognise and target cancer cells



1. Leukapheresis 2. Cell manufacturing White blood cells, including T cells, In the manufacturing facility T cells are collected from the patient using a type of immune cell - are modified a specialised process called to recognise and attack cancer cells leukapheresis Initially, the T cells are separated from the rest of the white blood cells and activated to begin growth We establish a chain of identity The cells are sent to which maintains traceability of our specialist manufacturing facility the patient's cells at all times The T cells are then engineered to produce surface chimeric antigen receptors (CARs), which help them recognise and target cancer cells Physicians will monitor patients following infusion to detect side effects related to CAR T therapy - sometimes patients are kept in These modified T cells hospital during this period. For ('CAR T cells') are expanded to achieve the final dose. infusion, patients are advised to 6. CAR T in action in one pack, ready for stay in proximity of the infusion infusion to the patient are in place to manage certain adverse events related to CAR T therapy and the patient's ongoing 4. Infusion 3. Quality assurance

The modified T cells are checked

criteria and then sent back to the

to ensure they meet our quality

infusion centre

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5. Monitoring

daily for the first 10 days

at least four weeks following

centre. Established protocols

progress is monitored