CANCER NURSING: PATIENT SAFETY

**CN46 Safe navigation of CARs in a changing landscape**

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**Background:** Advanced Therapy Medicinal Products (ATMPs) such as CD 19 chimeric antigen receptor (CAR) therapies offer unprecedented promise for long term remission and even cure in pre-treated and refractory B cell malignancies. Extensive interest in new T cell engineered treatments for other malignancies has developed as a result. These complex treatments are associated with acute and potentially fatal toxicities, making patient safety paramount. CARs are often delivered on haematopoietic stem cell transplant (HSCT) units with JACIE accreditation, an internationally recognised quality system. To enhance capacity for growing numbers of ATMP trials The Christie has utilised the NIHR clinical research facility (CRF).

**Methods:** Process mapping of the patient pathway alongside a gap analysis using JACIE standards has provided a framework to underpin the development of the CRF including: Advanced therapies team Increase in establishment Practice educator Education programme & HSCT placements JACIE quality manager to align SOPs and policies Changes to medical cover.

**Results:** Engagement across the organisation is a priority, with a focus on safety and mitigating risk. Recruitment to key posts is underway, along with specialised staff training. Relationships are being forged and strengthened with essential specialties such as critical care and neurology. The first clinical trials are open but recruitment and use of
the CRF will be carefully managed to ensure the infrastructure and processes are fit for purpose. The Christie is the lead organisation in a new consortium, iMATCH (Innovate Manchester Advanced Therapy Centre Hub) which has been awarded substantial funding from Innovate UK to scale up delivery of ATMPs and form a national network of Advanced Therapy Centres.

**Conclusions:** CD19 specific CAR therapy is poised to become a new standard care for selected B cell malignancies. Trials of ATMPs for a range of malignancies are growing exponentially, therefore safe delivery outside of an experienced area such as HSCT is important but challenging. Creative approaches to patient care, wide collaboration and executive level support are key. While iMATCH sets the challenge to increase the number of ATMPs available it has also facilitated city wide links and a national network to find solutions to complex problems.

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