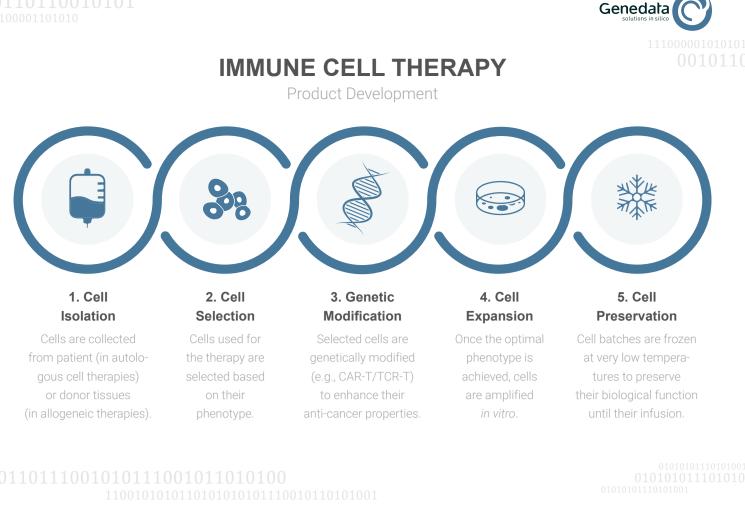
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AUTOLOGOUS & ALLOGENEIC

Comparison



Due to substantial differences in product batches, it is difficult to optimize and standardize As higher quantities of cells are collected, there is an opportunity to optimize and



Product Industrialization

As these therapies are developed according to demand, they require more time (for cell engineering) to be delivered to the patient.



As these therapies are developed for off-the-shelf administration, they can be rapidly delivered to the patient.

Time to Delivery

These cells are collected and re-infused back into the same patient; therefore, the risk of immunological elimination and GvHD is lower



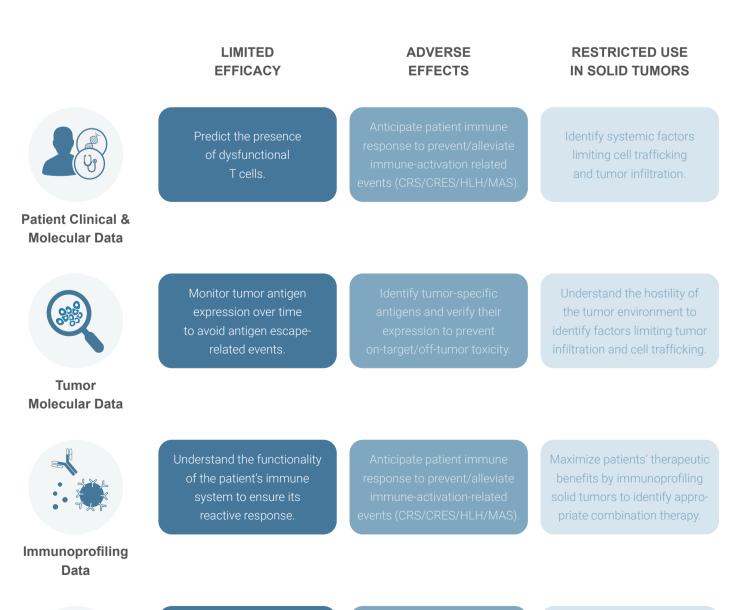
As these cells are collected from healthy donors and re-infused into different patients, this can trigger immunological reactions such as GvHD.

Immunological Reaction Risk

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CHALLENGES

Finding Solutions with Data





Predict cells' capacity to persist and expand in vivo. Identify sub-optimal cell populations. Ensure cell therapies are free of contamination through efficient and accurate quality assurance assay data analysis. Understand cell migratory properties to increase cell trafficking and tumor infiltration.

Cell Phenotypic & Functional Assay Data

Outlined in the columns are the challenges of immune cell therapies (limited efficacy, adverse effects, and limited use in solid tumors). The diagram shows how the integration of different types of experimental data (patient/clinical, tumor, immunoprofiling, phenotypic, and functional assay data), can improve efficacy, safety, and targeted application of diverse cell therapies.

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#Path To Precision

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