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ACCEPTED MANUSCRIPT

Anti-CD19 Chimeric Antigen Receptor Targeting of CD19+ Acute Myeloid Leukemia

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Abstract:

Aberrant expression of CD19 in acute myeloid leukemia (AML) is commonly associated with t(8;21)(q22;q22), although AML cases lacking this translocation occasionally express CD19. Mixed-phenotype acute leukemia also frequently expresses CD19. Chimeric antigen receptor (CAR) technology is a major breakthrough for cancer treatment, with the recent approval of CD19-directed CAR (CD19CAR) for treating B-cell malignancies. However, little information exists on using CD19CAR for other CD19 positive neoplasms such as AML. Our findings indicate that CD19CAR therapy can potentially be used for those with mixed phenotype leukemia and a subset of AML cases.

Introduction

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