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(54) Title: USE OF BISPECIFIC CD123 X CD3 DIABODIES FOR THE TREATMENT OF HEMATOLOGIC MALIGNANCIES

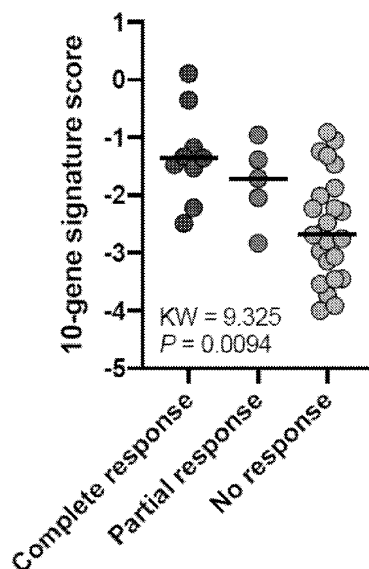


Figure 3

(57) **Abstract:** The present invention is directed to a method of treating a hematologic malignancy such as acute myeloid leukemia (AML) or myelodysplastic syndrome (MDS), including hematologic malignancies that are refractory to chemotherapeutic and/or hypomethylating agents. The method concerns administering a CD123 x CD3 bispecific binding molecule to a patient in an amount effective to stimulate the killing of cells of said hematologic malignancy in said patient. The present invention is particularly directed to the embodiment of such method in which a cellular sample from the patient prior to such administration evidences an expression of one or more target genes that is increased relative to a baseline level of expression of such genes, for example, a baseline level of expression of such genes in a reference population of individuals who are suffering from the hematologic malignancy, or with respect to the level of expression of a reference gene.

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