Supplemental Figure Legends

Supplemental Fig. S1. A. AML blasts from patient #20 harbored the trisomy 14 chromosomal abnormality. CD34+/lineage- MUC1^{10W} cells from this patient were inoculated into 6 NSG mice and followed for 90 days. At that time, the mice were sacrificed and bone marrow cells were analyzed for hCD45 (left). The hCD45+ population was gated and analyzed for hCD19 and hCD11C expression (right). B. The hCD45+ were also analyzed for trisomy 14 by FISH, demonstrating the absence of the chromosomal abnormality in this normal lymphoid population. As a control, blasts from the patient's bone marrow were used to document the presence of trisomy 14.

Supplemental Figure S2. CD34-/lineage- cells from patient #25 were sorted into $MUC1^{high}$ and $MUC1^{low}$ populations. A and B. The CD34-/lineage- MUC1^{high} cells were inoculated into NSG mice. At 60 days after inoculation, the mice were treated with PBS or GO-203 administered subcutaneously daily for 21 days, and then sacrificed. Spleen cells from a representative PBS-treated mouse were analyzed for hCD45, hCD11C and hCD20 expression (A). The orange-P2 gate represents the homogenous hCD45+/hCD11C+ leukemia population (A). Spleen cells from a representative GO-203-treated mouse were analyzed for hCD45, hCD11C and hCD20 expression (B). C and D. The CD34-/lineage- $MUC1^{low}$ cells were inoculated into NSG mice. At 60 days after inoculation, the mice were treated with PBS or GO-203 administered subcutaneously daily for 21 days, and then sacrificed. Spleen cells from a representative PBStreated mouse were analyzed for hCD45, hCD11C and hCD20 expression (C). Spleen cells from a representative GO-203-treated mouse were analyzed for hCD45, hCD11C and hCD20 expression (D).

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