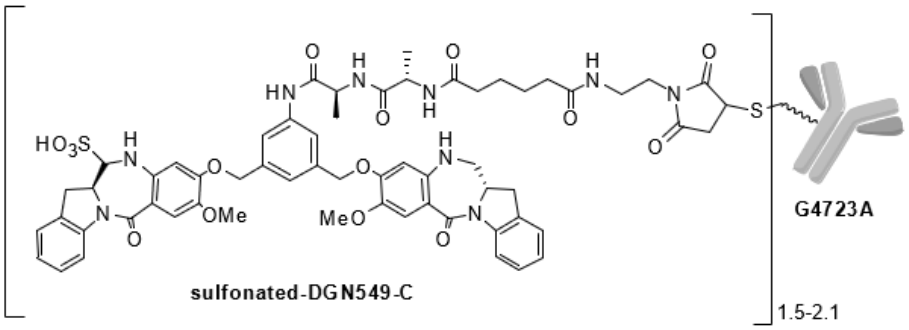
CLAIMS:

1. Use of an anti-CD123 immunoconjugate comprising an anti-CD123 antibody linked to an indolino-benzodiazepine (IGN) DNA-alkylator in the manufacture of a medicament for the treatment of blastic plasmacytoid dendritic cell neoplasm (BPDCN) in a human subject, wherein the medicament is to be administered to the subject at a dose of 0.045 mg anti-CD123 immunoconjugate/kg, wherein the medicament comprises anti-CD123 immunoconjugates with the following structure:




,

wherein the G4723A anti-CD123 antibody comprises a heavy chain comprising the amino acid sequence set forth in SEQ ID NO:3 and a light chain comprising the amino acid sequence set forth in SEQ ID NO:4, and wherein the medicament is for administration to the subject once per 21-day cycle.

2. The use of claim 1, wherein the medicament is to be administered for more than one cycle.

3. The use of claim 1, wherein the medicament is to be administered for at least 2 cycles, at least 3 cycles, at least 4 cycles, at least 5 cycles, at least 6 cycles, at least 7 cycles, at least 8 cycles, at least 9 cycles, or at least 10 cycles.

4. The use of claim 1, wherein the medicament is to be administered for about 2-4 cycles, about 2-6 cycles, about 2-8 cycles, or about 2-10 cycles.

5. The use of any one of claims 1-4, wherein the BPDCN is relapsed BPDCN and/or refractory BPDCN.

6. The use of claim 5, wherein the BPDCN is front line BPDCN.

7. The use of claim 6, wherein the subject is unfit for intensive chemotherapy.

8. The use of claim 6 or 7, wherein the subject is not eligible for SL-401 therapy.

9. The use of any one of claims 1-8, wherein the subject has an absolute neutrophil count of greater than 500 neutrophils/μL.

10. The use of any one of claims 1-9, wherein the subject has received at least one prior line of therapy.

11. The use of any one of claims 1-10, wherein the subject has received at least two prior lines of therapy.

12. The use of any one of claims 1-11, wherein the subject has received at least three prior lines of therapy, at least four prior lines of therapy, or at least five prior lines of therapy.

13. The use of any one of claims 1-12, wherein the medicament is to be administered intravenously.