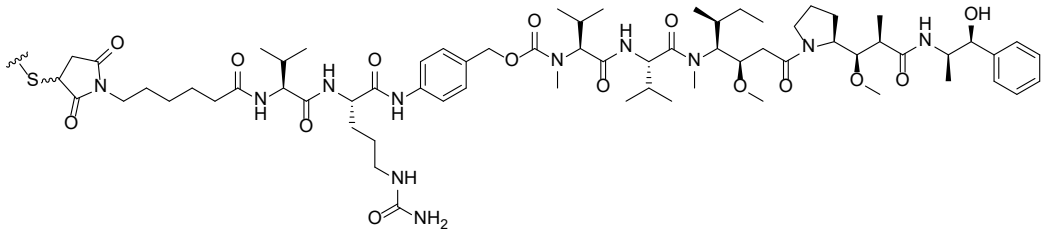
## CLAIMS

1. Use of a composition comprising conjugates of a CLDN6-specific antigen-binding protein covalently bound to heterologous moieties comprising structural formula (II):



,

in the manufacture of a medicament for inhibiting a solid tumor expressing claudin-6 (CLDN6) in a human subject, wherein  is a bond and a sulfur atom of the CLDN6-specific antigen-binding protein;

the CLDN6-specific antigen-binding protein comprises an antibody that binds CLDN6 or antigen-binding fragment thereof comprising:

(i) heavy chain (HC) CDR1 having a sequence GFTFSNYW (SEQ ID NO: 23);

(ii) HC CDR2 having a sequence IRLKSDNYAT (SEQ ID NO: 24),

(iii) HC CDR3 having a sequence NDGPPSGS (SEQ ID NO: 457),

(iv) light chain (LC) CDR1 having a sequence ENIYSY (SEQ ID NO: 20),

(v) LC CDR2 having a sequence NAK, and

(vi) LC CDR3 having a sequence QHHYTVPWT (SEQ ID NO: 22);

a first plurality of the conjugates are bound to four heterologous moieties of structural formula (II);

at least about 95% of the first plurality of conjugates are structurally homogenous;

the average number of heterologous moieties per CLDN6-specific antigen-binding protein in the composition is about 3.5 to about 4;

the effective amount is in a range of about 2.4 mg/kg to 4 mg/kg; and

a dose normalized $C_{max}$ value for unbound circulating monomethyl auristatin E (MMAE) is less than about 35 pg/mL per mg of the conjugate after administration of the composition, thereby reducing toxicity in the subject and inhibiting the solid tumor, and

wherein the composition is to be administered to the subject.

2. The use of claim 1, wherein the dose normalized $C_{max}$ value for unbound circulating MMAE is less than about 30 pg/mL per mg.

3. The use of claim 2, wherein the dose normalized $C_{max}$ value for unbound circulating MMAE is less than about 25 pg/mL per mg.

4. The use of claim 3, wherein the dose normalized $C_{max}$ value for unbound circulating MMAE is less than about 20 pg/mL per mg.

5. The use of claim 4, wherein the dose normalized $C_{max}$ value for unbound circulating MMAE is less than about 15 pg/mL per mg.

6 The use of claim 5, wherein the dose normalized $C_{max}$ value for unbound circulating MMAE is less than about 10 pg/mL per mg.

7. The use of claim 1, wherein the effective amount is about 3 mg/kg.

8. The use of claim 1, wherein the effective amount is about 3.6 mg/kg.

9. The use of claim 1, wherein the effective amount is about 4 mg/kg.

10. The use of claim 1, wherein the solid tumor is an ovarian tumor.

11. The use of claim 1, wherein the solid tumor is a bladder tumor.

12. The use of claim 1, wherein the solid tumor is a testicular tumor.

13. The use of claim 1, wherein the solid tumor is an endometrial tumor.

14. The use of claim 1, wherein the effective amount is in the range of about 2.4 mg/kg to 3.0 mg/kg.

15. The use of claim 1, wherein the effective amount is in the range of about 3 mg/kg to about 3.6 mg/kg.

16. The use of claim 1, wherein the composition is to be administered intravenously.

17. The use of claim 1, wherein the average number of heterologous moieties per CLDN6-specific antigen-binding protein in the composition is about 3.6 to about 3.9, or about 3.7 to about 3.8.

18. The use of claim 1, wherein, in the first plurality of conjugates, the heterologous moieties are covalently conjugated at unpaired cysteine residues of the CLDN6-specific antigen-binding protein.

19. The use of claim 1, wherein, in the first plurality of conjugates, the heterologous moieties are covalently conjugated at cysteine residues resulting from cleavage of the heavy chain-light chain interchain disulfide bonds of the CLDN6-specific antigen-binding protein.

20. The use of claim 1, wherein about 95%, about 96%, about 97%, or about 98% of the first plurality of conjugates are structurally homogenous.

21. The use of claim 1, wherein at a $C_{max}$ after administration, percent of unbound circulating MMAE in serum is less than about 0.007% $C_{max}$ of total CLDN6-specific antigen-binding proteins.

22. The use of claim 1, wherein at a $C_{max}$ after administration, percent of unbound circulating MMAE in serum is less than about 0.005% $C_{max}$ of total CLDN6-specific antigen-binding proteins.

23. The use of claim 1, wherein at a $C_{max}$ after administration, percent of unbound circulating MMAE in serum is less than about 0.018% $C_{max}$ of the conjugate.

24. The use of claim 1, wherein at a $C_{max}$ after administration, percent of unbound circulating MMAE in serum is less than about 0.01% $C_{max}$ of the conjugate.

25. The use of claim 1, wherein at a $C_{max}$ after administration, percent of unbound circulating MMAE in serum is less than about 0.007% $C_{max}$ of the conjugate.

26. The use of claim 1, wherein the effective amount of the composition is to be administered once every 1-4 weeks, once every 2-4 weeks, or once every 3 weeks.

27. The use of any one of the preceding claims, wherein prior to administration of the composition, a granulocyte-colony stimulating factor (G-CSF) is to be administered to the subject.