

WHAT IS CLAIMED IS:

1. A radioimmunoconjugate comprising the following structure:

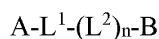
**Formula I-a**

wherein A is a chelating moiety or metal complex thereof,

wherein B is an FGFR3 targeting moiety, and

wherein L is a linker.

2. The radioimmunoconjugate of claim 1, wherein A is a metal complex of a chelating moiety.
3. The radioimmunoconjugate of claim 2, wherein the metal complex comprises a radionuclide.
4. The radioimmunoconjugate of claim 3, wherein the radionuclide is an alpha emitter.
5. The radioimmunoconjugate of claim 4, wherein the radionuclide is an alpha emitter selected from the group consisting of Astatine-211 (^{211}At), Bismuth-212 (^{212}Bi), Bismuth-213 (^{213}Bi), Actinium-225 (^{225}Ac), Radium-223 (^{223}Ra), Lead-212 (^{212}Pb), Thorium-227 (^{227}Th), and Terbium-149 (^{149}Tb), or a progeny thereof.
6. The radioimmunoconjugate of claim 5, wherein the radionuclide is ^{225}Ac or a progeny thereof.
7. The radioimmunoconjugate of claim 1, wherein L has the structure $-L^1-(L^2)_n-$, as shown within Formula I-b:

**Formula I-b**

wherein

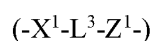
A is a chelating moiety or metal complex thereof;

B is an FGFR3 targeting moiety;

L^1 is optionally substituted C_1 - C_6 alkyl, optionally substituted C_1 - C_6 heteroalkyl, or optionally substituted aryl or heteroaryl;

n is between 1 and 5 (inclusive); and

each L^2 , independently, has the structure:



Formula III

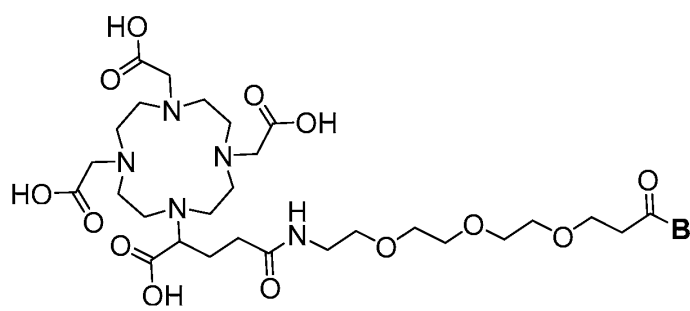
wherein

X^1 is $C=O(NR^1)$, $C=S(NR^1)$, $OC=O(NR^1)$, $NR^1C=O(O)$, $NR^1C=O(NR^1)$, $-CH_2PhC=O(NR^1)$, $-CH_2Ph(NH)C=S(NR^1)$, O , or NR^1 ; and each R^1 independently is H , optionally substituted C_1 - C_6 alkyl, optionally substituted C_1 - C_6 heteroalkyl, or optionally substituted aryl or heteroaryl, in which C_1 - C_6 alkyl can be substituted by oxo ($=O$), heteroaryl, or a combination thereof;

L^3 is optionally substituted C_1 - C_{50} alkyl or optionally substituted C_1 - C_{50} heteroalkyl; and

Z^1 is CH_2 , $C=O$, $C=S$, $OC=O$, $NR^1C=O$, or NR^1 , wherein R^1 is a hydrogen or optionally substituted C_1 - C_6 alkyl or pyrrolidine-2,5-dione.

8. The radioimmunoconjugate of claim 7, wherein L^3 is C_5 - C_{20} polyethylene glycol.
9. The radioimmunoconjugate of claim 7, or a pharmaceutically acceptable salt thereof wherein the radioimmunoconjugate comprises the following structure:



wherein B is an FGFR3 targeting moiety.

10. The radioimmunoconjugate of any one of claims 1-9, wherein the FGFR3 targeting moiety is at least 100 kDa in size.
11. The radioimmunoconjugate of claim 10, wherein the FGFR3 targeting moiety is at least 150 kDa in size.
12. The radioimmunoconjugate of claim 11, wherein the FGFR3 targeting moiety is at least 200 kDa in size.
13. The radioimmunoconjugate of claim 12, wherein the FGFR3 targeting moiety is at least 250 kDa in size.
14. The radioimmunoconjugate of claim 13, wherein the FGFR3 targeting moiety is at least 300 kDa in size.
15. The radioimmunoconjugate of any one of claims 1-14, wherein the FGFR3 targeting moiety is capable of binding to human FGFR3.
16. The radioimmunoconjugate of any one of claims 1-15, wherein the FGFR3 targeting moiety is capable of binding to wild type FGFR3.
17. The radioimmunoconjugate of any one of claims 1-15, wherein the FGFR3 targeting moiety is capable of binding to a mutant FGFR3.
18. The radioimmunoconjugate of any one of claims 17, wherein the FGFR3 targeting moiety is capable of binding to both wild type and a mutant FGFR3.
19. The radioimmunoconjugate of claim 17 or 18, wherein the mutant FGFR3 comprises a point mutation.

20. The radioimmunoconjugate of claim 19, wherein the point mutation is associated with cancer.
21. The radioimmunoconjugate of claim 20, wherein the point mutant is selected from the group consisting of FGFR3^{Y375C}, FGFR3^{R248C}, FGFR3^{S249C}, FGFR3^{G372C}, FGFR3^{K652E}, FGFR3^{K652Q}, FGFR3^{K652M}, and combinations thereof.
22. The radioimmunoconjugate of any one of claims 16-21, wherein the mutant FGFR3 comprises an FGFR3 fusion.
23. The radioimmunoconjugate of claim 22, wherein the FGFR3 fusion is selected from the group consisting of FGFR3-TACC3, FGFR3-CAMK2A, FGFR3-JAKMOP1, FGFR3-TNIP2, FGFR3-WHSC1, FGFR3-BAIAP2L1, and combinations thereof.
24. The radioimmunoconjugate of any one of claims 1-23, wherein the FGFR3 targeting moiety comprises an antibody or antigen-binding fragment thereof.
25. The radioimmunoconjugate of claim 24, wherein the antibody or antigen-binding fragment thereof is humanized.
26. The radioimmunoconjugate of claim 24 or 25, wherein the antibody or antigen-binding fragment thereof comprises at least one complementarity determining region (CDR) selected from the group consisting of:
- CDR-H1 comprising the amino acid sequence of SEQ ID NO: 1, or an amino acid sequence differing in 1 or 2 amino acids therefrom;
 - CDR-H2 comprising the amino acid sequence of SEQ ID NO: 2, or an amino acid sequence differing in 1 or 2 amino acids therefrom;
 - CDR-H3 comprising the amino acid sequence of SEQ ID NO: 3 or 4, or an amino acid sequence differing in 1 or 2 amino acids from SEQ ID NO: 3 or 4;
 - CDR-L1 comprising the amino acid sequence of SEQ ID NO: 5, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-L2 comprising the amino acid sequence of SEQ ID NO: 6, or an amino acid sequence differing in 1 or 2 amino acids therefrom; or

CDR-L3 comprising the amino acid sequence of SEQ ID NO: 7, or an amino acid sequence differing in 1 or 2 amino acids therefrom.

27. The radioimmunoconjugate of claim 26, wherein the antibody or antigen-binding fragment thereof comprises at least two CDRs selected from the group consisting of:

CDR-H1 comprising the amino acid sequence of SEQ ID NO: 1, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-H2 comprising the amino acid sequence of SEQ ID NO: 2, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-H3 comprising the amino acid sequence of SEQ ID NO: 3 or 4, or an amino acid sequence differing in 1 or 2 amino acids from SEQ ID NO: 3 or 4;

CDR-L1 comprising the amino acid sequence of SEQ ID NO: 5, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-L2 comprising the amino acid sequence of SEQ ID NO: 6, or an amino acid sequence differing in 1 or 2 amino acids therefrom; or

CDR-L3 comprising the amino acid sequence of SEQ ID NO: 7, or an amino acid sequence differing in 1 or 2 amino acids therefrom.

28. The radioimmunoconjugate of claim 27, wherein the antibody or antigen-binding fragment thereof comprises at least three CDRs selected from the group consisting of:

CDR-H1 comprising the amino acid sequence of SEQ ID NO: 1, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-H2 comprising the amino acid sequence of SEQ ID NO: 2, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-H3 comprising the amino acid sequence of SEQ ID NO: 3 or 4, or an amino acid sequence differing in 1 or 2 amino acids from SEQ ID NO: 3 or 4;

CDR-L1 comprising the amino acid sequence of SEQ ID NO: 5, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-L2 comprising the amino acid sequence of SEQ ID NO: 6, or an amino acid sequence differing in 1 or 2 amino acids therefrom; or

CDR-L3 comprising the amino acid sequence of SEQ ID NO: 7, or an amino acid sequence differing in 1 or 2 amino acids therefrom.

29. The radioimmunoconjugate of claim 28, wherein the antibody or antigen-binding fragment thereof comprises at least four CDRs selected from the group consisting of:

CDR-H1 comprising the amino acid sequence of SEQ ID NO: 1, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-H2 comprising the amino acid sequence of SEQ ID NO: 2, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-H3 comprising the amino acid sequence of SEQ ID NO: 3 or 4, or an amino acid sequence differing in 1 or 2 amino acids from SEQ ID NO: 3 or 4;

CDR-L1 comprising the amino acid sequence of SEQ ID NO: 5, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-L2 comprising the amino acid sequence of SEQ ID NO: 6, or an amino acid sequence differing in 1 or 2 amino acids therefrom; or

CDR-L3 comprising the amino acid sequence of SEQ ID NO: 7, or an amino acid sequence differing in 1 or 2 amino acids therefrom.

30. The radioimmunoconjugate of claim 29, wherein the antibody or antigen-binding fragment thereof comprises at least five CDRs selected from the group consisting of:

CDR-H1 comprising the amino acid sequence of SEQ ID NO: 1, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-H2 comprising the amino acid sequence of SEQ ID NO: 2, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-H3 comprising the amino acid sequence of SEQ ID NO: 3 or 4, or an amino acid sequence differing in 1 or 2 amino acids from SEQ ID NO: 3 or 4;

CDR-L1 comprising the amino acid sequence of SEQ ID NO: 5, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-L2 comprising the amino acid sequence of SEQ ID NO: 6, or an amino acid sequence differing in 1 or 2 amino acids therefrom; or

CDR-L3 comprising the amino acid sequence of SEQ ID NO: 7, or an amino acid sequence differing in 1 or 2 amino acids therefrom.

31. The radioimmunoconjugate of claim 30, wherein the antibody or antigen-binding fragment thereof comprises:

CDR-H1 comprising the amino acid sequence of SEQ ID NO: 1, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-H2 comprising the amino acid sequence of SEQ ID NO: 2, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-H3 comprising the amino acid sequence of SEQ ID NO: 3 or 4, or an amino acid sequence differing in 1 or 2 amino acids from SEQ ID NO: 3 or 4;

CDR-L1 comprising the amino acid sequence of SEQ ID NO: 5, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-L2 comprising the amino acid sequence of SEQ ID NO: 6, or an amino acid sequence differing in 1 or 2 amino acids therefrom; and

CDR-L3 comprising the amino acid sequence of SEQ ID NO: 7, or an amino acid sequence differing in 1 or 2 amino acids therefrom.

32. The radioimmunoconjugate of claim 24 or 25, wherein the antibody or antigen-binding fragment thereof comprises

(i) a heavy chain variable domain comprising at least one CDR selected from the group consisting of:

CDR-H1 comprising the amino acid sequence of SEQ ID NO: 1, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-H2 comprising the amino acid sequence of SEQ ID NO: 2, or an amino acid sequence differing in 1 or 2 amino acids therefrom; and

CDR-H3 comprising the amino acid sequence of SEQ ID NO: 3 or 4, or an amino acid sequence differing in 1 or 2 amino acids from SEQ ID NO: 3 or 4; and

(ii) a light chain variable domain comprising at least one CDR selected from the group consisting of:

CDR-L1 comprising the amino acid sequence of SEQ ID NO: 5, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-L2 comprising the amino acid sequence of SEQ ID NO: 6, or an amino acid sequence differing in 1 or 2 amino acids therefrom; and

CDR-L3 comprising the amino acid sequence of SEQ ID NO: 7, or an amino acid sequence differing in 1 or 2 amino acids therefrom.

33. The radioimmunoconjugate of claim 32, wherein the antibody or antigen-binding fragment thereof comprises

(i) a heavy chain variable domain comprising at least one CDR selected from the group consisting of:

CDR-H1 comprising the amino acid sequence of SEQ ID NO: 1;

CDR-H2 comprising the amino acid sequence of SEQ ID NO: 2; and

CDR-H3 comprising the amino acid sequence of SEQ ID NO: 3 or 4; and

(ii) a light chain variable domain comprising at least one CDR selected from the group consisting of:

CDR-L1 comprising the amino acid sequence of SEQ ID NO: 5;

CDR-L2 comprising the amino acid sequence of SEQ ID NO: 6; and

CDR-L3 comprising the amino acid sequence of SEQ ID NO: 7.

34. The radioimmunoconjugate of claim 32 or 33, wherein the antibody or antigen-binding fragment thereof comprises

(i) a heavy chain variable domain comprising at least two CDRs selected from the group consisting of:

CDR-H1 comprising the amino acid sequence of SEQ ID NO: 1, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-H2 comprising the amino acid sequence of SEQ ID NO: 2, or an amino acid sequence differing in 1 or 2 amino acids therefrom; and

CDR-H3 comprising the amino acid sequence of SEQ ID NO: 3 or 4, or an amino acid sequence differing in 1 or 2 amino acids from SEQ ID NO: 3 or 4; and

(ii) a light chain variable domain comprising at least two CDRs selected from the group consisting of:

CDR-L1 comprising the amino acid sequence of SEQ ID NO: 5, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-L2 comprising the amino acid sequence of SEQ ID NO: 6, or an amino acid sequence differing in 1 or 2 amino acids therefrom; and

CDR-L3 comprising the amino acid sequence of SEQ ID NO: 7, or an amino acid sequence differing in 1 or 2 amino acids therefrom.

35. The radioimmunoconjugate of claim 34, wherein the antibody or antigen-binding fragment thereof comprises

(i) a heavy chain variable domain comprising at least two CDRs selected from the group consisting of:

CDR-H1 comprising the amino acid sequence of SEQ ID NO: 1;

CDR-H2 comprising the amino acid sequence of SEQ ID NO: 2; and

CDR-H3 comprising the amino acid sequence of SEQ ID NO: 3 or 4; and

(ii) a light chain variable domain comprising at least two CDRs selected from the group consisting of:

CDR-L1 comprising the amino acid sequence of SEQ ID NO: 5;

CDR-L2 comprising the amino acid sequence of SEQ ID NO: 6; and

CDR-L3 comprising the amino acid sequence of SEQ ID NO: 7.

36. The radioimmunoconjugate of claim 35, wherein the antibody or antigen-binding fragment thereof comprises

(i) a heavy chain variable domain comprising:

CDR-H1 comprising the amino acid sequence of SEQ ID NO: 1, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-H2 comprising the amino acid sequence of SEQ ID NO: 2, or an amino acid sequence differing in 1 or 2 amino acids therefrom; and

CDR-H3 comprising the amino acid sequence of SEQ ID NO: 3 or 4, or an amino acid sequence differing in 1 or 2 amino acids from SEQ ID NO: 3 or 4; and

(ii) a light chain variable domain comprising:

CDR-L1 comprising the amino acid sequence of SEQ ID NO: 5, or an amino acid sequence differing in 1 or 2 amino acids therefrom;

CDR-L2 comprising the amino acid sequence of SEQ ID NO: 6, or an amino acid sequence differing in 1 or 2 amino acids therefrom; and

CDR-L3 comprising the amino acid sequence of SEQ ID NO: 7, or an amino acid sequence differing in 1 or 2 amino acids therefrom.

37. The radioimmunoconjugate of claim 36, wherein the antibody or antigen-binding fragment thereof comprises

(i) a heavy chain variable domain comprising:

CDR-H1 comprising the amino acid sequence of SEQ ID NO: 1;

CDR-H2 comprising the amino acid sequence of SEQ ID NO: 2; and

CDR-H3 comprising the amino acid sequence of SEQ ID NO: 3 or 4;

and

(ii) a light chain variable domain comprising:

CDR-L1 comprising the amino acid sequence of SEQ ID NO: 5;

CDR-L2 comprising the amino acid sequence of SEQ ID NO: 6; and

CDR-L3 comprising the amino acid sequence of SEQ ID NO: 7.

38. The radioimmunoconjugate of any one of claims 27-37, wherein the antibody or antigen-binding fragment thereof comprises

(i) a heavy chain variable domain having an amino acid sequence with at least 85% identity with the amino acid sequence of SEQ ID NO: 8; and

(ii) a light chain variable domain having an amino acid sequence with at least 85% identity with the amino acid sequence of SEQ ID NO: 9.

39. The radioimmunoconjugate of claim 38, wherein the antibody or antigen-binding fragment thereof comprises

(i) a heavy chain variable domain having an amino acid sequence with at least 90% identity with the amino acid sequence of SEQ ID NO: 8; and

(ii) a light chain variable domain having an amino acid sequence with at least 90% identity with the amino acid sequence of SEQ ID NO: 9.

40. The radioimmunoconjugate of claim 39, wherein the antibody or antigen-binding fragment thereof comprises

(i) a heavy chain variable domain having an amino acid sequence with at least 95% identity with the amino acid sequence of SEQ ID NO: 8; and

(ii) a light chain variable domain having an amino acid sequence with at least 95% identity with the amino acid sequence of SEQ ID NO: 9.

41. The radioimmunoconjugate of claim 40, wherein the antibody or antigen-binding fragment thereof comprises

(i) a heavy chain variable domain comprising the amino acid sequence of SEQ ID NO: 8; and

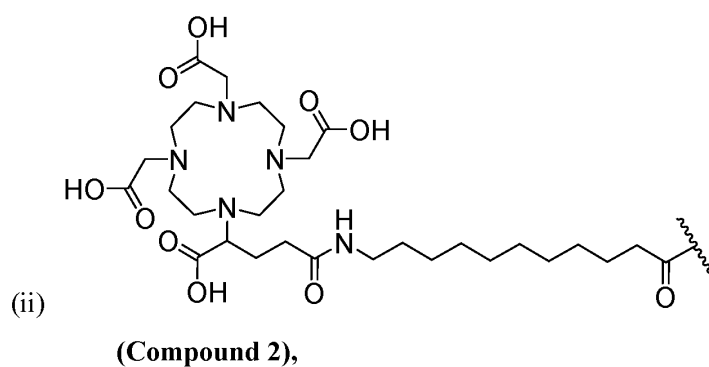
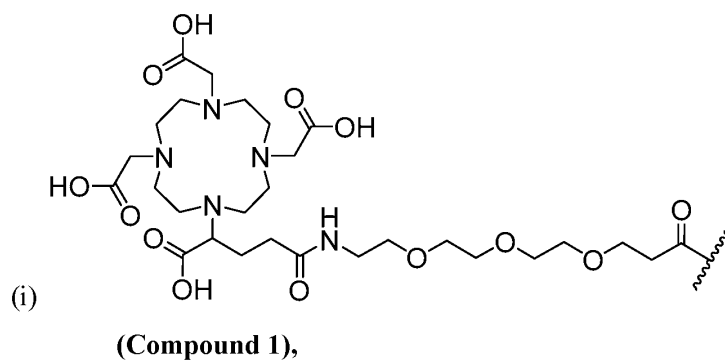
(ii) a light chain variable domain comprising the amino acid sequence of SEQ ID NO: 9.

42. The radioimmunoconjugate of claim 41, wherein the antibody is MFGR1877S (vofatamab).

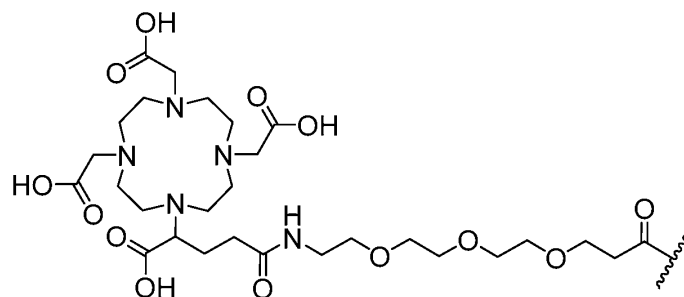
43. The radioimmunoconjugate of any one of claims 1-42, wherein, after administration of the radioimmunoconjugate or a composition thereof to a mammal, the proportion of radiation excreted by the intestinal routes, renal route, or both routes is at least 2-fold greater than the proportion of radiation excreted by the same route(s) by a comparable mammal that has been administered a reference radioimmunoconjugate.

44. The radioimmunoconjugate of claim 43, wherein, after administration of the radioimmunoconjugate or a composition thereof to a mammal, the proportion of radiation excreted by the intestinal routes, renal route, or both routes is at least 3-fold greater than the proportion of radiation excreted by the same route(s) by a comparable mammal that has been administered a reference radioimmunoconjugate.

45. The radioimmunoconjugate of claim 1, wherein A-L- is a metal complex of a compound selected from the group consisting of:



46. The radioimmunoconjugate of claim 45, wherein A-L- is a metal complex of:



(Compound 1)

47. The radioimmunoconjugate of claim 46, wherein the metal complex comprises a radionuclide.
48. The radioimmunoconjugate of claim 47, wherein the radionuclide is an alpha emitter.
49. The radioimmunoconjugate of claim 48, wherein the radionuclide is an alpha emitter selected from the group consisting of Astatine-211 (²¹¹At), Bismuth-212 (²¹²Bi), Bismuth-213 (²¹³Bi), Actinium-225 (²²⁵Ac), Radium-223 (²²³Ra), Lead-212 (²¹²Pb), Thorium-227 (²²⁷Th), and Terbium-149 (¹⁴⁹Tb), or a progeny thereof.
50. The radioimmunoconjugate of claim 49, wherein the radionuclide is ²²⁵Ac or a progeny thereof.
51. The radioimmunoconjugate of claim 50, wherein the FGFR3 targeting moiety comprises an antibody or antigen-binding fragment thereof.
52. The radioimmunoconjugate of claim 51, wherein the antibody or antigen-binding fragment thereof is humanized.
53. The radioimmunoconjugate of claim 52, wherein the antibody or antigen-binding fragment thereof comprises
- (i) a heavy chain variable domain comprising:

CDR-H1 comprising the amino acid sequence of SEQ ID NO: 1;
CDR-H2 comprising the amino acid sequence of SEQ ID NO: 2; and
CDR-H3 comprising the amino acid sequence of SEQ ID NO: 3 or 4;
and

(ii) a light chain variable domain comprising:

CDR-L1 comprising the amino acid sequence of SEQ ID NO: 5;
CDR-L2 comprising the amino acid sequence of SEQ ID NO: 6; and
CDR-L3 comprising the amino acid sequence of SEQ ID NO: 7.

54. The radioimmunoconjugate of claim 52, wherein the antibody or antigen-binding fragment thereof comprises

- (i) a heavy chain variable domain having an amino acid sequence with at least 95% identity with the amino acid sequence of SEQ ID NO: 8; and
- (ii) a light chain variable domain having an amino acid sequence with at least 95% identity with the amino acid sequence of SEQ ID NO: 9.

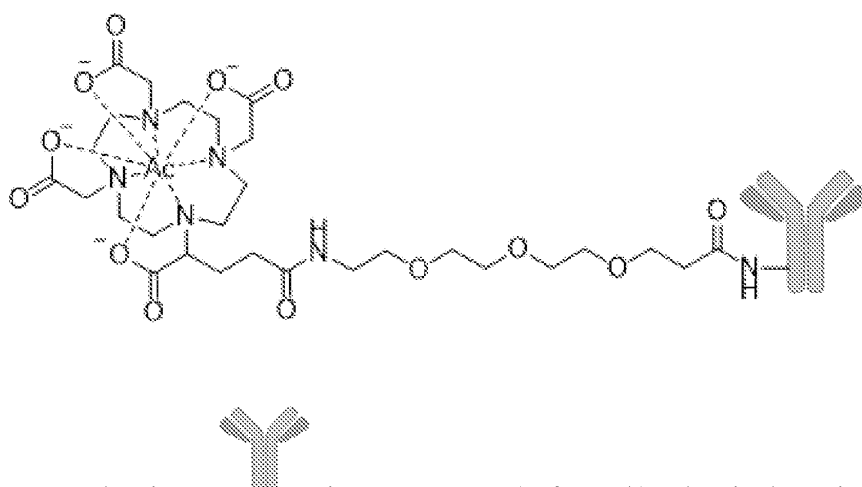
55. The radioimmunoconjugate of claim 54, wherein the antibody or antigen-binding fragment thereof comprises

- (i) a heavy chain variable domain comprising the amino acid sequence of SEQ ID NO: 8; and
- (ii) a light chain variable domain comprising the amino acid sequence of SEQ ID NO: 9.

56. The radioimmunoconjugate of claim 55, wherein the antibody or antigen-binding fragment thereof is MFGR1877S (vofatamab) or an antigen-binding fragment thereof.

57. The radioimmunoconjugate of claim 56, wherein the antibody or antigen-binding fragment thereof is MFGR1877S (vofatamab).

58. The radioimmunoconjugate of claim 46, said radioimmunoconjugate comprising the following structure:



wherein  is MFGR1877S (vofatamab), wherein the amine group NH- attached to the antibody shown above is from a lysine unit that is part of the antibody.

59. A pharmaceutical composition comprising the radioimmunoconjugate of any one of claims 1-58 and a pharmaceutically acceptable carrier.
60. A method of treating cancer, the method comprising administering to a subject in need thereof a pharmaceutical composition comprising an effective amount of the radioimmunoconjugate of any one of claims 1-58.
61. The method of claim 60, wherein the subject is a mammal.
62. The method of claim 61, wherein the mammal is a human.
63. The method of any one of claims 60-62, wherein the cancer is a solid tumor cancer.
64. The method of claim 63, wherein the solid tumor cancer is adrenocortical carcinoma, bladder cancer, breast cancer, cervical cancer, colorectal cancer, endometrial adenocarcinoma, Ewing's sarcoma, gallbladder carcinoma, glioma, head and neck cancer, liver cancer, lung cancer, neuroblastoma, neuroendocrine cancer, pancreatic cancer, prostate cancer, renal cell carcinoma, salivary adenoid cystic cancer, or spermatocytic seminoma.

- 65. The method of claim 64, wherein the solid tumor cancer is bladder cancer.
- 66. The method of claim 64, wherein the solid tumor cancer is glioma.
- 67. The method of claim 64, wherein the solid tumor cancer is neuroblastoma.
- 68. The method of claim 64, wherein the solid tumor cancer is pancreatic cancer.
- 69. The method of claim 64, wherein the solid tumor cancer is breast cancer.
- 70. The method of claim 64, wherein the solid tumor cancer is head and neck cancer.
- 71. The method of claim 64, wherein the solid tumor cancer is liver cancer.
- 72. The method of claim 64, wherein the solid tumor cancer is lung cancer.
- 73. The method of any one of claims 60-62, wherein the cancer is a non-solid tumor cancer.
- 74. The method of claim 73, wherein the cancer is a liquid cancer or hematologic cancer.
- 75. The method of claim 74, wherein the cancer is a myeloma.
- 76. The method of claim 75, wherein the myeloma is multiple myeloma.
- 77. The method of claim 74, wherein the cancer is a leukemia.
- 78. The method of claim 74, wherein the cancer is lymphoma.
- 79. The method of any one of claims 60-78, wherein the pharmaceutical composition is administered systemically.

80. The method of claim 79, wherein the pharmaceutical composition is administered parenterally.

81. The method of claim 80, wherein the pharmaceutical composition is administered intravenously.

82. The method of claim 80, wherein the pharmaceutical composition is administered intraarterially.

83. The method of claim 80, wherein the pharmaceutical composition is administered intraperitoneally.

84. The method of claim 80, wherein the pharmaceutical composition is administered subcutaneously.

85. The method of claim 80, wherein the pharmaceutical composition is administered intradermally.

86. The method of claim 79, wherein the pharmaceutical composition is administered enterically.

87. The method of claim 86, wherein the pharmaceutical composition is administered trans-gastrointestinally.

88. The method of claim 86, wherein the pharmaceutical composition is administered orally.

89. The method of any one of claims 60-78, wherein the pharmaceutical composition is administered locally.

90. The method of claim 89, wherein the pharmaceutical composition is administered by peritumoral injection.

91. The method of claim 89, wherein the pharmaceutical composition is administered by intratumoral injection.