WHAT IS CLAIMED IS:

1. A method for treating a human patient having cancer comprising administering to the patient an effective dose of an immunoconjugate that binds to FOLR1 polypeptide, wherein the administration produces a Cmax of about 100-150 μg/mL.
2. The method of claim 1, wherein the immunoconjugate is administered at a dose of about 3 mg/kg to about 6 mg/kg.
3. The method of claim 2, wherein the immunoconjugate is administered at a dose of about 3.0 mg/kg.
4. The method of claim 2, wherein the immunoconjugate is administered at a dose of about 3.3 mg/kg.
5. The method of claim 2, wherein the immunoconjugate is administered at a dose of about 5.0 mg/kg.
6. The method of claim 2, wherein the immunoconjugate is administered at a dose of about 5.5 mg/kg.
7. The method of claim 2, wherein the immunoconjugate is administered at a dose of about 6.0 mg/kg.
8. The method of claim 1, wherein the immunoconjugate is administered at a dose of about 6.5 mg/kg.
9. The method of any one of claims 1-8, wherein the immunoconjugate is administered about once every week.
10. Cancelled.
11. Cancelled.
12. The method of any one of claims 1-9, wherein the immunoconjugate comprises an antibody comprising a light chain CDR1 comprising SEQ ID NO:6, a light chain CDR2 comprising SEQ ID NO:7, a light chain CDR3 comprising SEQ ID NO:8, a heavy chain CDR1 comprising SEQ ID NO:9, a heavy chain CDR2 comprising SEQ ID NO: 10 or 11, and a heavy chain CDR3 comprising SEQ ID NO:12.
13. The method of claim 12, wherein the immunoconjugate comprises an antibody comprising a variable light chain comprising SEQ ID NO:5 and a variable heavy chain comprising SEQ ID NO:3.
14. The method of claim 13, wherein the immunoconjugate is IMGN853.

15. The method of any one of claims 1-9 and 12-14, wherein the immunoconjugate is administered intravenously.
16. The method of any one of claims 1-9 and 12-15, wherein cancer is selected from the group consisting of ovarian, brain, breast, uterine, endometrial, pancreatic, renal, and lung cancer.
17. The method of claim 16, wherein the lung cancer is non small cell lung cancer or bronchioloalveolar carcinoma.
18. The method of claim 16, wherein the ovarian cancer is epithelial ovarian cancer.
19. The method of claim 18, wherein the ovarian cancer is platinum resistant, relapsed, or refractory.
20. The method of any one of claims 1-9 and 12-19, wherein the cancer expresses FOLR1 polypeptide or nucleic acid.
21. The method of claim 20, wherein the FOLR1 expression levels are measured by immunohistochemistry (IHC).
22. The method of any one of claims 1-9 and 12-21, further comprising administering a steroid to the patient.
23. The method of claim 22, wherein the steroid is dexamethasone.
24. The method of any one of claims 1-9 and 12-22, wherein the administration results in a decrease in tumor size.
25. The method of any one of claims 1-9, 12-16, and 18-25, wherein the cancer is ovarian cancer and wherein the administration results in a decrease in CA125.
26. The method of any one of claims 1-9 and 12-25, wherein the administration results in a decrease in adverse effects.

Claims

1. A medicament comprising an immunoconjugate that binds to FOLR1 for use in treating a cancer that expresses FOLR1 polypeptide, wherein administration of the medicament produces a Cmax of 100-150 μg/mL.

2. The medicament of claim 1, wherein the immunoconjugate is for administration at a dose of about 3 mg/kg to about 6 mg/kg.

3. The medicament of claim 2, wherein the immunoconjugate is for administration at a dose of about 3.0 mg/kg, about 3.3 mg/kg, about 5.0 mg/kg, about 5.5 mg/kg, about 6.0 mg/kg, or about 6.5 mg/kg.

4. The medicament of claim 1, wherein the immunoconjugate is for administration about once every week.

5. The medicament of any one of claims 1-4, wherein the immunoconjugate comprises an antibody or antigen-binding fragment thereof comprising a light chain CDR1 comprising SEQ ID NO:6, a light chain CDR2 comprising SEQ ID NO:7, a light chain CDR3 comprising SEQ ID NO:8, a heavy chain CDR1 comprising SEQ ID NO:9, a heavy chain CDR2 comprising SEQ ID NO: 10 or 11, and a heavy chain CDR3 comprising SEQ ID NO:12.

6. The medicament of claim 5, wherein the immunoconjugate comprises an antibody or antigen-binding fragment thereof comprising a variable light chain comprising SEQ ID NO:5 and a variable heavy chain comprising SEQ ID NO:3.

7. The medicament of claim 6, wherein the immunoconjugate is IMGN853.

8. The medicament of any one of claims 1-7, wherein the immunoconjugate is to be administered intravenously.

9. The medicament of any one of claims 1-8, wherein cancer is selected from the group consisting of ovarian cancer, brain cancer, breast cancer, uterine cancer, endometrial cancer, pancreatic cancer, renal cancer, cancer of the peritoneum, and lung cancer.

10. The medicament of claim 9, wherein the lung cancer is non small cell lung cancer or bronchioloalveolar carcinoma.

11. The medicament of claim 9, wherein the ovarian cancer is epithelial ovarian cancer, platinum resistant ovarian cancer, relapsed ovarian cancer, or refractory ovarian cancer.

12. The medicament of claim 1, wherein the FOLR1 expression levels are measured by immunohistochemistry (IHC).

13. The medicament of any one of claims 1-12, wherein the medicament is for co-administration with a steroid, wherein the steroid is optionally dexamethasone.

14. The medicament of any one of claims 1-13, wherein the administration results in a decrease in tumor size or a decrease in CA125.