

WHAT IS CLAIMED IS:

1. A method for the treatment of a lung cancer in a patient, the method comprising:
administering to said patient an effective dose of a targeted therapeutic agent that specifically binds to one or more cell-surface antigens, including CD24, CD166, CD56, CD326, CD298, CD29, CD63, CD9, CD164, CD99, CD46, CD59, CD57, CD165, and EpCAM.
2. The method of Claim 1, wherein further comprising administering a second targeted reagent that selectively blocks CD47 binding to SIRP α .
3. The method of Claim 2, wherein the second targeted agent comprises a soluble SIRP α polypeptide.
4. The method of Claim 3, wherein the first agent is an antibody selective for a cell surface marker.
5. The method of Claim 1, wherein the lung cancer is small cell lung cancer.
6. The method of Claim 5, wherein said marker is selected from CD56, CD99, CD44 and EpCam.
7. The method of Claim 2, wherein the first and second agents are comprised in a bispecific antibody selective for CD47 and for a second cancer associated cell marker.

WHAT IS CLAIMED IS:

1. Use of a combination of (i) an agent that selectively blocks CD47 binding to SIRP α and (ii) a targeted therapeutic agent that specifically binds to one or more cell-surface antigens on lung cancer cells, in the manufacture of a medicament for treating an individual with lung cancer, wherein the medicament is to be administered in a dose effective to increase depletion of the lung cancer cells.
2. The use of claim 1, wherein the agent that selectively blocks CD47 binding to SIRP α is an antibody.
3. The use of claim 2, wherein the antibody specifically binds to CD47.
4. The use of claim 2, wherein the antibody specifically binds to SIRP α .
5. The use of claim 1, wherein the agent that selectively blocks CD47 binding to SIRP α is a soluble SIRP α polypeptide.
6. The use of claim 1, wherein the agent that selectively blocks CD47 binding to SIRP α is a soluble CD47 polypeptide.
7. The use of claim 1, wherein the one or more cell-surface antigens on lung cancer cells are selected from CD24, CD166, CD56, CD326, CD298, CD29, CD63, CD9, CD164, CD99, CD46, CD59, CD57, CD165, and EpCAM.
8. The use of claim 1, wherein the combination of agents is to be administered simultaneously.
9. The use of claim 1, wherein the combination of agents is to be administered sequentially.
10. The use of claim 1, wherein the combination of agents is to be administered in overlapping dosing regimens
11. The use of claim 1, wherein the individual is a human.
12. The use of Claim 11, wherein the lung cancer is small cell lung cancer.

13. The use of Claim 12, wherein said marker is selected from CD56, CD99, CD44 and EpCam.

14. The use of claim 1, wherein the combination of agents provides for a synergistic effect.

15. The use of claim 3 wherein the antibody is 5F9-G4.

16. Use of a targeted therapeutic agent that specifically binds to a cell surface antigen selected from CD99, CD44, EpCam, CD24, CD166, CD56, CD326, CD298, CD29, CD63, CD9, CD164, CD46, CD59, CD57, and CD165, in the manufacture of a medicament for the treatment of a lung cancer in a patient.