23. The method of claim 22, wherein the weight ratio of TfRscFv:lipid is about 0.3:1 to about 0.4:1.

24. The method of claim 23, wherein the weight ratio of TfRscFv:lipid is about 0.33:1.

25. ~~A method~~ Use of a targeted temozolomide cationic liposome complex prepared by:

i. preparing a lipid solution comprising 1,2-dioleoyl-3-trimethylammonium propane (DOTAP) and 1,2-dioleoyl-sn-glycero-3-phosphoethanolamine (DOPE) in ethanol;

ii. preparing a solution of temozolomide;

iii. mixing the lipid solution with the solution of temozolomide;

iv. injecting the mixture of lipid and temozolomide into an aqueous solution, thereby forming a temozolomide cationic liposome; and

v. mixing the temozolomide cationic liposome with a ligand to form the targeted temozolomide cationic liposome, wherein the ligand is directly complexed with, but not chemically conjugated to, the cationic liposome,

for the manufacture of a medicament for treating cancer in a patient. ~~, comprising administering to the patient a targeted temozolomide cationic liposome complex, wherein the targeted temozolomide cationic liposome complex comprises:~~

~~(a) a cationic liposome comprising 1,2-dioleoyl-3-trimethylammonium propane (DOTAP) and 1,2-dioleoyl-sn-glycero-3-phosphoethanolamine (DOPE);~~

~~(b) temozolomide; and~~

~~(c) a ligand directly complexed with, but not chemically conjugated to, the cationic liposome.~~

26. The ~~method~~ use of claim 25, wherein the ligand is an antibody, an antibody fragment or a protein.

27. The ~~method~~ use of claim 26, wherein the ligand is a single chain Fv antibody fragment.

28. The ~~method~~ use of claim 27, wherein the single chain Fv antibody fragment is an anti-transferrin receptor single chain Fv (TfRscFv).

29. The ~~method~~ use of claim 25, wherein the temozolomide is formulated for ~~administered~~ administration to the patient at a dose of about 10 mg/$m^2$ to about 500 mg/$m^2$.

30. The ~~method~~ use of claim 29, wherein the temozolomide is formulated for ~~administered~~ administration to the patient at a dose of about 50 mg/$m^2$ to about 250 mg/$m^2$.

31. The ~~method~~ use of claim 25, wherein the molar ratio of lipid in the cationic liposome:temozolomide is about 0.1:1 to about 5:1.

32. The ~~method~~ use of claim 31, wherein the molar ratio of lipid in the cationic liposome:temozolomide is about 0.5:1 to about 2:1.

33. The ~~method~~ use of claim 32, wherein the molar ratio of lipid in the cationic liposome:temozolomide is about 1:1.

34. The ~~method~~ use of claim 25, wherein the weight ratio of ligand:lipid in the cationic liposome is about 0.01:1 to about 0.5:1.

35. The ~~method~~ use of claim 34, wherein the weight ratio of ligand:lipid in the cationic liposome is about 0.3:1 to about 0.4:1.

36. The ~~method~~ use of claim 28, wherein the weight ratio of TfRscFv:lipid in the cationic liposome is about 0.33:1.

37. The ~~method~~ use of claim 25, wherein the medicament is formulated for ~~administration is~~ intravenous (IV), intratumoral (IT), intralesional (IL), sublingual (SL), aerosal, percutaneous, oral, endoscopic, topical, intramuscular (IM),

intradermal (ID), intraocular (IO), intraperitoneal (IP), transdermal (TD), intranasal (IN), intracereberal (IC), intraorgan (e.g. intrahepatic), slow release implant, or subcutaneous administration, or via administration using an osmotic or mechanical pump.

38. The ~~method~~ use of claim 25, wherein the cancer is head and neck cancer, breast cancer, prostate cancer, pancreatic cancer, brain cancer, neuroendocrine cancer, cervical cancer, lung cancer, liver cancer, liposarcoma, rhabdomyosarcoma, choriocarcinoma, melanoma, retinoblastoma, ovarian cancer, urogenital cancer, gastric cancer, colorectal cancer, multiple myeloma or a cancer of the blood.

39. The ~~method~~ use of claim 38, wherein the brain cancer is a glioma, astrocytoma or a glioblastoma.

40. The ~~method~~ use of claim 25, wherein the ~~further comprising administering an additional therapy to the patient in combination with the~~ targeted temozolomide cationic liposome complex medicament is to be administered in combination with an additional therapy.

41. The ~~method~~ use of claim 40, wherein the additional therapy comprises administration of a chemotherapeutic agent, a small molecule, radiation therapy or a nucleic acid-based therapy.

42. The ~~method~~ use of claim 41, wherein the nucleic acid-based therapy comprises administration of a cationic liposome complex comprising a plasmid DNA expressing wild-type p53.

43. ~~A~~ Use ~~method~~ of a targeted temozolomide cationic liposome complex prepared by:

i. preparing a lipid solution comprising 1,2-dioleoyl-3-trimethylammonium propane (DOTAP) and 1,2-dioleoyl-sn-glycero-3-phosphoethanolamine (DOPE) in ethanol;

ii. preparing a solution of temozolomide;

iii. mixing the lipid solution with the solution of temozolomide;

iv. injecting the mixture of lipid and temozolomide into an aqueous solution, thereby forming a temozolomide cationic liposome; and

v. mixing the temozolomide cationic liposome with an anti-transferrin receptor single chain Fv (TfRscFv) to form the targeted temozolomide cationic liposome, wherein the anti-transferrin receptor single chain Fv (TfRscFv) is directly complexed with, but not chemically conjugated to, the cationic liposome,

for the manufacture of a medicament for treating brain cancer in a patient~~, comprising administering to the patient a targeted temozolomide cationic liposome complex, wherein the targeted temozolomide cationic liposome complex comprises:~~

~~(a) a cationic liposome comprising 1,2-dioleoyl-3-trimethylammonium propane (DOTAP) and 1,2-dioleoyl-sn-glycero-3-phosphoethanolamine (DOPE);~~

~~(b) temozolomide; and~~

~~(c) an anti-transferrin receptor single chain Fv (TfRscFv) directly complexed with, but not chemically conjugated to, the cationic liposome~~.

44. The ~~method~~ use of claim 43, wherein the temozolomide is formulated for ~~administered~~ administration to the patient at a dose of about 10 mg/m$^2$ to about 500 mg/m$^2$.

45. The use~~method~~ of claim 44, wherein the temozolomide is formulated for ~~administered~~ administration to the patient at a dose of about 100 mg/m$^2$ to about 250 mg/m$^2$.

46. The use~~method~~ of claim 43, wherein the molar ratio of lipid in the cationic liposome:temozolomide is about 0.1:1 to about 5:1.

47. The use~~method~~ of claim 46, wherein the molar ratio of lipid in the cationic liposome:temozolomide is about 0.5:1 to about 2:1.

48. The use~~method~~ of claim 47, wherein the molar ratio of lipid in the cationic liposome:temozolomide is about 1:1.

49. The use~~method~~ of claim 43, wherein the weight ratio of TfRscFv:lipid in the cationic liposome is about 0.01:1 to about 0.5:1.

50. The use~~method~~ of claim 49, wherein the weight ratio of TfRscFv:lipid in the cationic liposome is about 0.3:1 to about 0.4:1.

51. The use~~method~~ of claim 50, wherein the weight ratio of TfRscFv:lipid in the cationic liposome is about 0.33:1.

52. The use~~method~~ of claim 43, wherein the medicament is formulated for ~~administration is~~ intravenous (IV), intratumoral (IT), intralesional (IL), aerosal, percutaneous, oral, endoscopic, topical, intramuscular (IM), intradermal (ID), sublingual (SL), intraocular (IO), intraperitoneal (IP), transdermal (TD), intranasal (IN), intracereberal (IC), intraorgan (e.g. intrahepatic), slow release implant, or subcutaneous administration, or via administration using an osmotic or mechanical pump.

53. The use~~method~~ of claim 43, wherein the brain cancer is a glioma, astrocytoma or a glioblastoma.

54. ~~A~~ Use ~~method~~ of a targeted temozolomide cationic liposome complex prepared by the method of claim 1 for the manufacture of a medicament for treating cancer in a patient~~, comprising administering to the patient a targeted temozolomide cationic liposome complex prepared by the method of claim 1~~.

55. The ~~method~~ use of claim 54, wherein the ligand is an antibody, an antibody fragment or a protein.

56. The use~~method~~ of claim 55, wherein the ligand is a single chain Fv antibody fragment.

57. The use~~method~~ of claim 56, wherein the single chain Fv antibody fragment is an anti-transferrin receptor single chain Fv (TfRscFv).

58. The use~~method~~ of claim 54, wherein temozolomide is formulated for ~~administered~~ administration to the patient at a dose of about 10 mg/$m^2$ to about 500 mg/$m^2$.

59. The use~~method~~ of claim 58, wherein temozolomide is formulated for ~~administered~~ administration to the patient at a dose of about 50 mg/$m^2$ to about 250 mg/$m^2$.

60. The use~~method~~ of claim 54, wherein the molar ratio of lipid:temozolomide is about 0.1:1 to about 5:1.

61. The use~~method~~ of claim 57, wherein the molar ratio of lipid:temozolomide is about 0.5:1 to about 2:1.

62. The use~~method~~ of claim 60, wherein the molar ratio of lipid:temozolomide is about 1:1.

63. The use~~method~~ of claim 54, wherein the weight ratio of ligand:lipid is about 0.01:1 to about 0.5:1.

64. The use~~method~~ of claim 63, wherein the weight ratio of ligand:lipid is about 0.3:1 to about 0.4:1.

65. The use~~method~~ of claim 54, wherein the medicament is formulated for~~administration is~~ intravenous (IV), intratumoral (IT), intralesional (IL), aerosal, percutaneous, oral, endoscopic, topical, intramuscular (IM), intradermal (ID), sublingual (SL), intraocular (IO), intraperitoneal (IP), transdermal (TD), intranasal (IN), intracereberal (IC), intraorgan (e.g. intrahepatic), slow release implant, or

subcutaneous administration, or via administration using an osmotic or mechanical pump

66. The use~~method~~ of claim 54, wherein the cancer is head and neck cancer, breast cancer, prostate cancer, pancreatic cancer, brain cancer, neuroendocrine cancer, cervical cancer, lung cancer, liver cancer, liposarcoma, rhabdomyosarcoma, choriocarcinoma, melanoma, retinoblastoma, ovarian cancer, urogenital cancer, gastric cancer, colorectal cancer, multiple myeloma or a cancer of the blood.

67. The use~~method~~ of claim 66, wherein the brain cancer is a glioma, astrocytoma or a glioblastoma.

68. The use~~method~~ of claim 54, wherein ~~further comprising administering an additional therapy to the patient in combination with~~ the targeted temozolomide cationic liposome complex medicament is to be administered in combination with an additional therapy to the patient.

69. The use~~method~~ of claim 68, wherein the additional therapy comprises administration of a chemotherapeutic agent, a small molecule, radiation therapy or a nucleic acid-based therapy.

70. The use~~method~~ of claim 69, wherein the nucleic acid-based therapy comprises administration of a cationic liposome complex comprising a plasmid DNA expressing wild-type p53.

71. A method of preparing a targeted melphalan cationic liposome complex, comprising:

(a) preparing a lipid solution comprising one or more cationic lipids in ethanol;

(b) preparing a solution of melphalan;

(c) mixing the lipid solution with the solution of melphalan;

(d) injecting the mixture of lipid and melphalan into an aqueous solution, thereby forming a melphalan cationic liposome;

(e) mixing the melphalan cationic liposome with a ligand to form the targeted melphalan cationic liposome, wherein the ligand is directly complexed with, but not chemically conjugated to, the cationic liposome.

72. The method of claim 71, wherein the ligand is an antibody, an antibody fragment or a protein.

73. The method of claim 72, wherein the ligand is a single chain Fv antibody fragment.

74. The method of claim 73, wherein the single chain Fv antibody fragment is an anti-transferrin receptor single chain Fv (TfRscFv).

75. The method of claim 71, wherein the solution of melphalan is prepared in absolute ethanol plus hydrochloric acid.

76. The method of claim 71, wherein the lipid solution comprises 1,2-dioleoyl-3-trimethylammonium propane (DOTAP) and 1,2-dioleoyl-sn-glycero-3-phosphoethanolamine (DOPE).

77. The method of claim 71, wherein the solution of melphalan is prepared at a concentration of about 1 mM to about 200 mM.

78. The method of claim 77, wherein the solution of melphalan is prepared at a concentration of about 50 mM to about 200 mM.

79. The method of claim 71, wherein the molar ratio of lipid:melphalan is about 0.1:1 to about 5:1.

80. The method of claim 79, wherein the molar ratio of lipid:melphalan is about 0.5:1 to about 2:1.

81. The method of claim 80, wherein the molar ratio of lipid:melphalan is about 1:1.

82. The method of claim 71, wherein the weight ratio of ligand:lipid is about 0.01:1 to about 0.5:1.

83. The method of claim 82, wherein the weight ratio of ligand:lipid is about 0.3:1 to about 0.4:1.

84. The method of claim 74, wherein the weight ratio of TfRscFv:lipid is about 0.33:1.

85. A method of preparing a targeted melphalan cationic liposome complex, comprising:

(a) preparing a lipid solution comprising 1,2-dioleoyl-3-trimethylammonium propane (DOTAP) and 1,2-dioleoyl-sn-glycero-3-phosphoethanolamine (DOPE)in ethanol;

(b) preparing a solution of melphalan;

(c) mixing the lipid solution with the solution of melphalan;

(d) injecting the mixture of lipid and melphalan into an aqueous solution, thereby forming a melphalan cationic liposome;

(e) mixing the melphalan cationic liposome with an anti-transferrin receptor single chain Fv (TfRscFv) to form the targeted melphalan cationic liposome complex, wherein the TfRscFv is directly complexed with, but not chemically conjugated to, the cationic liposome.

86. The method of claim 85, wherein the solution of melphalan is prepared in absolute ethanol plus hydrochloric acid.

87. The method of claim 85, wherein the solution of melphalan is prepared at a concentration of about 1 mM to about 200 mM.

88. The method of claim 87, wherein the solution of melphalan is prepared at a concentration of about 50 mM to about 200 mM

89. The method of claim 88, wherein the solution of melphalan is prepared at a concentration of about 145 mM to about 150 mM.

90. The method of claim 85, wherein the molar ratio of lipid:melphalan is about 0.1:1 to about 5:1.

91. The method of claim 90, wherein the molar ratio of lipid:melphalan is about 0.5:1 to about 2:1.

92. The method of claim 91, wherein the molar ratio of lipid:melphalan is about 1:1.

93. The method of claim 85, wherein the weight ratio of TfRscFv:lipid is about 0.01:1 to about 0.5:1.

94. The method of claim 93, wherein the weight ratio of TfRscFv:lipid is about 0.3:1 to about 0.4:1.

95. The method of claim 93, wherein the weight ratio of TfRscFv:lipid is about 0.33:1.

96. ~~A method~~Use of a targeted melphalan cationic liposome complex prepared by:

i. preparing a lipid solution comprising 1,2-dioleoyl-3-trimethylammonium propane (DOTAP) and 1,2-dioleoyl-sn-glycero-3-phosphoethanolamine (DOPE) in ethanol;

ii. preparing a solution of melphalan;

iii. mixing the lipid solution with the solution of melphalan;

iv. injecting the mixture of lipid and melphalan into an aqueous solution, thereby forming a melphalan cationic liposome; and

v. mixing the melphalan cationic liposome with a ligand to form the targeted melphalan cationic liposome, wherein the ligand is directly complexed with, but not chemically conjugated to, the cationic liposome,

for the manufacture of a medicament for treating cancer in a patient~~, comprising administering to the patient a targeted melphalan cationic liposome complex, wherein the targeted melphalan cationic liposome complex comprises:~~

~~(a) a cationic liposome comprising 1,2-dioleoyl-3-trimethylammonium propane (DOTAP) and 1,2-dioleoyl-sn-glycero-3-phosphoethanolamine (DOPE);~~

~~(b) melphalan; and~~

~~(c) a ligand directly complexed with, but not chemically conjugated to, the cationic liposome~~.

97. The use~~method~~ of claim 96, wherein the ligand is an antibody, an antibody fragment or a protein.

98. The use~~method~~ of claim 97, wherein the ligand is a single chain Fv antibody fragment.

99. The use~~method~~ of claim 98, wherein the single chain Fv antibody fragment is an anti-transferrin receptor single chain Fv (TfRscFv).

100. The use~~method~~ of claim 96, wherein the melphalan is ~~administered~~ formulated for administration to the patient at a dose of about 1 mg/m2 to about 100 mg/m2.

101. The use~~method~~ of claim 100, wherein the melphalan is ~~administered~~ formulated for administration to the patient at a dose of about 5 mg/m2 to about 20 mg/m2.

102. The use~~method~~ of claim 96, wherein the molar ratio of lipid in the cationic liposome:melphalan is about 0.1:1 to about 5:1.

103. The use~~method~~ of claim 102, wherein the molar ratio of lipid in the cationic liposome:melphalan is about 0.5:1 to about 2:1.

104. The use~~method~~ of claim 103, wherein the molar ratio of lipid in the cationic liposome:melphalan is about 1:1.

105. The use~~method~~ of claim 96, wherein the weight ratio of ligand:lipid in the cationic liposome is about 0.01:1 to about 0.5:1.

106. The use~~method~~ of claim 105, wherein the weight ratio of ligand:lipid in the cationic liposome is about 0.3:1 to about 0.4:1.

107. The use~~method~~ of claim 99, wherein the weight ratio of TfRscFv:lipid in the cationic liposome is about 0.33:1.

108. The use~~method~~ of claim 96, wherein the medicament is formulated for ~~administration is~~ intravenous (IV), intratumoral (IT), intralesional (IL), sublingual (SL), aerosal, percutaneous, oral, endoscopic, topical, intramuscular (IM), intradermal (ID), intraocular (IO), intraperitoneal (IP), transdermal (TD), intranasal (IN), intracereberal (IC), intraorgan (e.g. intrahepatic), slow release implant, or subcutaneous administration, or via administration using an osmotic or mechanical pump.

109. The use~~method~~ of claim 96, wherein the cancer is head and neck cancer, breast cancer, prostate cancer, pancreatic cancer, brain cancer, neuroendocrine cancer, cervical cancer, lung cancer, liver cancer, liposarcoma, rhabdomyosarcoma, choriocarcinoma, melanoma, retinoblastoma, ovarian cancer, urogenital cancer, gastric cancer, colorectal cancer, multiple myeloma or a cancer of the blood.

110. The use~~method~~ of claim 109, wherein the cancer is multiple myeloma.

111. The use~~method~~ of claim 96, wherein the targeted melphalan cationic liposome complex medicament is to be administered in combination with an additional therapy~~further comprising administering an additional therapy to the patient in combination with the targeted melphalan cationic liposome complex~~.

112. The ~~method~~ use of claim 111, wherein the additional therapy comprises administration of a chemotherapeutic agent, a small molecule, radiation therapy or a nucleic acid-based therapy.

113. The ~~method~~ use of claim 112, wherein the nucleic acid-based therapy comprises administration of a cationic liposome complex comprising a plasmid DNA expressing wild-type p53.

114. ~~A method~~Use of a targeted melphalan cationic liposome complex prepared by:

i. preparing a lipid solution comprising 1,2-dioleoyl-3-trimethylammonium propane (DOTAP) and 1,2-dioleoyl-sn-glycero-3-phosphoethanolamine (DOPE) in ethanol;

ii. preparing a solution of melphalan;

iii. mixing the lipid solution with the solution of melphalan;

iv. injecting the mixture of lipid and melphalan into an aqueous solution, thereby forming a melphalan cationic liposome; and

v. mixing the melphalan cationic liposome with an anti-transferrin receptor single chain Fv (TfRscFv) to form the targeted melphalan cationic liposome, wherein the anti-transferrin receptor single chain Fv (TfRscFv) is directly complexed with, but not chemically conjugated to, the cationic liposome,

for the manufacture of a medicament for treating cancer in a patient~~, comprising administering to the patient a targeted melphalan cationic liposome complex, wherein the targeted melphalan cationic liposome complex comprises:~~

~~(a) a cationic liposome comprising 1,2-dioleoyl-3-trimethylammonium propane (DOTAP) and 1,2-dioleoyl-sn-glycero-3-phosphoethanolamine (DOPE);~~

~~(b) melphalan; and~~

~~(c) an anti-transferrin receptor single chain Fv (TfRscFv) directly complexed with, but not chemically conjugated to, the cationic liposome~~.

115. The ~~method~~ use of claim 114, wherein the melphalan is ~~administered~~ formulated for administration to the patient at a dose of about 1 mg/m$^2$ to about 100 mg/m$^2$.

116. The use~~method~~ of claim 115, wherein the melphalan is ~~administered~~ formulated for administration to the patient at a dose of about 5 mg/m$^2$ to about 20 mg/m$^2$.

117. The use~~method~~ of claim 114, wherein the molar ratio of lipid in the cationic liposome:melphalan is about 0.1:1 to about 5:1.

118. The use~~method~~ of claim 117, wherein the molar ratio of lipid in the cationic liposome:melphalan is about 0.5:1 to about 2:1.

119. The use~~method~~ of claim 118, wherein the molar ratio of lipid in the cationic liposome:melphalan is about 1:1.

120. The use~~method~~ of claim 114, wherein the weight ratio of TfRscFv:lipid in the cationic liposome is about 0.01:1 to about 0.5:1.

121. The use~~method~~ of claim 120, wherein the weight ratio of TfRscFv:lipid in the cationic liposome is about 0.3:1 to about 0.4:1.

122. The use~~method~~ of claim 121, wherein the weight ratio of TfRscFv:lipid in the cationic liposome is about 0.33:1.

123. The use~~method~~ of claim 114, wherein the medicament is formulated for~~administration is~~ intravenous (IV), intratumoral (IT), intralesional (IL), aerosal, percutaneous, oral, endoscopic, topical, intramuscular (IM), intradermal (ID), sublingual (SL), intraocular (IO), intraperitoneal (IP), transdermal (TD), intranasal (IN), intracereberal (IC), intraorgan (e.g. intrahepatic), slow release implant, or subcutaneous administration, or via administration using an osmotic or mechanical pump.

124. The use~~method~~ of claim 114, wherein the cancer is multiple myeloma.

125. ~~A~~ Use~~method~~ of a targeted melphalan cationic liposome complex prepared by the method of claim 71 for the manufacture of a medicament for treating cancer in a patient~~, comprising administering to the patient a targeted melphalan cationic liposome complex prepared by the method of claim 71~~.

126. The ~~method~~ use of claim 125, wherein the ligand is an antibody, an antibody fragment or a protein.

127. The use~~method~~ of claim 126, wherein the ligand is a single chain Fv antibody fragment.

128. The use~~method~~ of claim 127, wherein the single chain Fv antibody fragment is an anti-transferrin receptor single chain Fv (TfRscFv).

129. The use~~method~~ of claim 125, wherein melphalan is formulated for ~~administered~~ administration to the patient at a dose of about 1 mg/m$^2$ to about 100 mg/m$^2$.

130. The use~~method~~ of claim 129, wherein melphalan is formulated for ~~administered~~ administration to the patient at a dose of about 5 mg/m$^2$ to about 20 mg/m$^2$.

131. The use~~method~~ of claim 125, wherein the molar ratio of lipid:melphalan is about 0.1:1 to about 5:1.

132. The use~~method~~ of claim 128, wherein the molar ratio of lipid:melphalan is about 0.5:1 to about 2:1.

133. The use~~method~~ of claim 131, wherein the molar ratio of lipid:melphalan is about 1:1.

134. The use~~method~~ of claim 125, wherein the weight ratio of ligand:lipid is about 0.01:1 to about 0.5:1.

135. The use~~method~~ of claim 134, wherein the weight ratio of ligand:lipid is about 0.3:1 to about 0.4:1.

136. The use~~method~~ of claim 125, wherein the medicament is formulated for~~administration is~~ intravenous (IV), intratumoral (IT), intralesional (IL), aerosal, percutaneous, oral, endoscopic, topical, intramuscular (IM), intradermal (ID), sublingual (SL), intraocular (IO), intraperitoneal (IP), transdermal (TD), intranasal (IN), intracereberal (IC), intraorgan (e.g. intrahepatic), slow release implant, or subcutaneous administration, or via administration using an osmotic or mechanical pump

137. The use~~method~~ of claim 125, wherein the cancer is head and neck cancer, breast cancer, prostate cancer, pancreatic cancer, brain cancer, neuroendocrine cancer, cervical cancer, lung cancer, liver cancer, liposarcoma, rhabdomyosarcoma, choriocarcinoma, melanoma, retinoblastoma, ovarian cancer, urogenital cancer, gastric cancer, colorectal cancer, multiple myeloma or a cancer of the blood.

138. The use~~method~~ of claim 137, wherein the cancer is multiple myeloma.

139. The use~~method~~ of claim 125, wherein the targeted melphalan cationic liposome complex medicament is to be administered in combination with an additional therapy~~further comprising administering an additional therapy to the patient in combination with the targeted melphalan cationic liposome complex~~.

140. The use~~method~~ of claim 139, wherein the additional therapy comprises administration of a chemotherapeutic agent, a small molecule, radiation therapy or a nucleic acid-based therapy.

141. The use~~method~~ of claim 140, wherein the nucleic acid-based therapy comprises administration of a cationic liposome complex comprising a plasmid DNA expressing wild-type p53.

142. ~~A~~ Use of~~method treating a brain cancer in a patient, comprising administering to the patient~~:

(a) a cationic liposome complex comprising:

(1) a cationic liposome comprising 1,2-dioleoyl-3-trimethylammonium propane (DOTAP) and 1,2-dioleoyl-sn-glycero-3-phosphoethanolamine (DOPE);

(2) a plasmid DNA expressing wild-type p53; and

(3) an anti-transferrin receptor single chain Fv (TfRscFv) directly complexed with, but not chemically conjugated to, the cationic liposome; and

(b) temozolomide,

for the manufacture of a medicament for treating a brain cancer in a patient.

143. The use~~method~~ of claim 142, wherein the temozolomide is formulated for ~~administered~~ administration at the same time or after the cationic liposome complex.

144. The use~~method~~ of claim 142, wherein the temozolomide is formulated for ~~administered~~ administration to the patient at a dose of about 10 mg/m$^2$ to about 500 mg/m$^2$.

145. The use~~method~~ of claim 144, wherein the temozolomide is formulated for ~~administered~~ administration to the patient at a dose of about 100 mg/m$^2$ to about 250 mg/m$^2$.

146. The use~~method~~ of claim 142, wherein the medicament is formulated for ~~administration is~~ intravenous (IV), intratumoral (IT), intralesional (IL), aerosal, percutaneous, oral, endoscopic, topical, intramuscular (IM), intradermal (ID), sublingual (SL), intraocular (IO), intraperitoneal (IP), transdermal (TD), intranasal (IN), intracereberal (IC), intraorgan (e.g. intrahepatic), slow release implant, or subcutaneous administration, or via administration using an osmotic or mechanical pump.

147. The use~~method~~ of claim 142, wherein the brain cancer is a glioma, astrocytoma or glioblastoma.

148. ~~A~~ Use~~method~~ of ~~treating organophosphate poisoning in a patient, comprising administering to the patient a targeted atropine cationic liposome complex, wherein the targeted atropine cationic liposome complex comprises:~~

~~(a) a cationic liposome comprising 1,2-dioleoyl-3-trimethylammonium propane (DOTAP) and 1,2-dioleoyl-sn-glycero-3-phosphoethanolamine (DOPE);~~

~~(b) atropine; and~~

~~(c) a ligand directly complexed with, but not chemically conjugated to, the cationic liposome.~~

a targeted atropine cationic liposome complex prepared by:

i. preparing a lipid solution comprising 1,2-dioleoyl-3-trimethylammonium propane (DOTAP) and 1,2-dioleoyl-sn-glycero-3-phosphoethanolamine (DOPE) in ethanol;

ii. preparing a solution of atropine;

iii. mixing the lipid solution with the solution of atropine;

iv. injecting the mixture of lipid and atropine into an aqueous solution, thereby forming an atropine cationic liposome; and

v. mixing the atropine cationic liposome with a ligand to form the targeted atropine cationic liposome, wherein the ligand is directly complexed with, but not chemically conjugated to, the cationic liposome,

for the manufacture of a medicament for treating organophosphate poisoning in a patient.

149. The use~~method~~ of claim 148, wherein the ligand is an antibody, an antibody fragment or a protein.

150. The use~~method~~ of claim 149, wherein the ligand is a single chain Fv antibody fragment.

151. The use~~method~~ of claim 150, wherein the single chain Fv antibody fragment is an anti-transferrin receptor single chain Fv (TfRscFv).

152. The use~~method~~ of claim 148, wherein the atropine is ~~administered~~ formulated for administration to the patient at a dose of about 1 mg to about 10 mg.

153. The use~~method~~ of claim 152, wherein the atropine is ~~administered~~ formulated for administration to the patient at a dose of about 2 mg to about 6 mg.

154. The use~~method~~ of claim 148, wherein the molar ratio of lipid in the cationic liposome: atropine is about 0.1:1 to about 5:1.

155. The use~~method~~ of claim 154, wherein the molar ratio of lipid in the cationic liposome: atropine is about 0.5:1 to about 2:1.

156. The use~~method~~ of claim 155, wherein the molar ratio of lipid in the cationic liposome: atropine is about 1:1.

157. The use~~method~~ of claim 148, wherein the weight ratio of ligand:lipid in the cationic liposome is about 0.01:1 to about 0.5:1.

158. The use~~method~~ of claim 157, wherein the weight ratio of ligand:lipid in the cationic liposome is about 0.3:1 to about 0.4:1.

159. The use~~method~~ of claim 151, wherein the weight ratio of TfRscFv:lipid in the cationic liposome is about 0.33:1.

160. The use~~method~~ of claim 148, wherein the medicament is formulated for~~administration is~~ intravenous (IV), intratumoral (IT), intralesional (IL), sublingual (SL), aerosal, percutaneous, oral, endoscopic, topical, intramuscular (IM), intradermal (ID), intraocular (IO), intraperitoneal (IP), transdermal (TD), intranasal (IN), intracereberal (IC), intraorgan (e.g. intrahepatic), slow release

implant, or subcutaneous administration, or via administration using an osmotic or mechanical pump.

161. The use~~method~~ of claim 148, wherein the liposome crosses the blood-brain barrier.