What is claimed is:

1. A method of treating a HER2/neu-expressing tumor growth or cancer in a subject, the method comprising the step of administering a composition comprising a recombinant attenuated *Listeria* comprising nucleic acid encoding a recombinant polypeptide, wherein said recombinant polypeptide comprises a HER2/neu chimeric antigen fused to an additional polypeptide, wherein said nucleic acid molecule comprises a first open reading frame encoding said recombinant polypeptide, wherein said nucleic acid molecule further comprises a second open reading frame encoding a metabolic enzyme, and wherein said metabolic enzyme complements an endogenous gene that is mutated in the chromosome of said recombinant *Listeria* strain.

2. The method of claim 1, wherein said composition comprises a Listeria dose of about 3.3×10^9 Listeria.

3. The method of claim 1, wherein said subject is a human or a canine subject.

4. The method of claim 3, wherein said human subject is a child, an adolescent or an adult.

5. The method of claim 1, wherein administering said fusion polypeptide to said subject prevents escape mutations within said tumor.

6. The method of claim 1, wherein said HER2/neu chimeric antigen is a human chimeric HER2/neu comprising at least 5, 9, 13, 14, or 17 of the mapped human MHC-class I epitopes.

7. The method of claim 1, wherein said chimeric HER2/neu is a chimeric canine HER2/neu.

8. The method of claim 1, wherein said nucleic acid molecule is integrated into the *Listeria* genome.

9. The method of claim 1, wherein said nucleic acid molecule is in a plasmid in said recombinant *Listeria* vaccine strain and wherein said plasmid is stably maintained in said recombinant *Listeria* vaccine strain in the absence of antibiotic selection.

10. The method of claim 1, wherein said recombinant *Listeria* comprises a mutation in the actA virulence gene.

11. The method of claim 1, wherein said additional polypeptide is selected from the group

consisting of: a) non-hemolytic LLO protein or N-terminal fragment, b) a PEST sequence, or c) an ActA fragment.

12. The method of claim 1, wherein said metabolic enzyme encoded by said second open reading frame is an alanine racemase enzyme or a D-amino acid transferase enzyme.

13. The method of claim 1, further comprising an independent adjuvant.

14. The method of claim 12, wherein said adjuvant comprises a granulocyte/macrophage colony-stimulating factor (GM-CSF) protein, a nucleotide molecule encoding a GM-CSF protein, saponin QS21, monophosphoryl lipid A, or an unmethylated CpG-containing oligonucleotide.

15. The method of claim 1, wherein said tumor is a HER2/neu positive tumor and wherein said cancer is a HER2/neu-expressing cancer.

16. The method of claim 1, wherein said cancer is osteosarcoma, ovarian cancer, gastric cancer, central nervous system (CNS) cancer, or Ewing's sarcoma (ES).

17. The method of claim 16, wherein said osteosarcoma cancer is a canine osteosarcoma.

18. The method of claim 16, wherein said osteosarcoma is a pediatric osteosarcoma.

19. A method of eliciting an enhanced immune response against a HER2/neu-expressing tumor growth or cancer in a subject, the method comprising the step of administering a composition comprising a recombinant attenuated *Listeria* strain comprising a nucleic acid encoding a recombinant polypeptide, wherein said fusion polypeptide comprises a HER2/neu chimeric antigen fused to an additional polypeptide, wherein said nucleic acid molecule comprises a first open reading frame encoding said recombinant polypeptide, wherein said nucleic acid molecule further comprises a second open reading frame encoding a metabolic enzyme, and wherein said metabolic enzyme complements an endogenous gene that is mutated in the chromosome of said recombinant *Listeria* strain.

20. The method of claim 1, wherein said composition comprises a Listeria dose of about 3.3×10^9 Listeria.

21. The method of claim 19, wherein said subject is a human or a canine subject.

22. The method of claim 21, wherein said human subject is a child, an adolescent or an

adult.

23. The method of claim 19, wherein administering said fusion polypeptide to said subject having a Her2/neu-expressing tumor prevents escape mutations within said tumor.

24. The method of claim 19, wherein said HER2/neu chimeric antigen is a human chimeric HER2/neu comprising at least 5, 9, 13, 14, or 17 of the mapped human MHC-class I epitopes.

25. The method of claim 19, wherein said chimeric HER2/neu is a chimeric canine HER2/neu.

26. The method of claim 19, wherein said nucleic acid molecule is integrated into the *Listeria* genome.

27. The method of claim 19, wherein said nucleic acid molecule is in a plasmid in said recombinant *Listeria* vaccine strain.

28. The method of claim 19, wherein said plasmid is stably maintained in said recombinant *Listeria* vaccine strain in the absence of antibiotic selection.

29. The method of claim 19, wherein said recombinant *Listeria* comprises a mutation in the actA virulence gene.

30. The method of claim 19, wherein said additional polypeptide is selected from the group consisting of: a) non-hemolytic LLO protein or N-terminal fragment, b) a PEST sequence, or c) an ActA fragment.

31. The method of claim 19, wherein said metabolic enzyme encoded by said second open reading frame is an alanine racemase enzyme or a D-amino acid transferase enzyme.

32. The method of claim 19, further comprising an independent adjuvant.

33. The method of claim 32, wherein said adjuvant comprises a granulocyte/macrophage colony-stimulating factor (GM-CSF) protein, a nucleotide molecule encoding a GM-CSF protein, saponin QS21, monophosphoryl lipid A, or an unmethylated CpG-containing oligonucleotide.

34. The method of claim 19, wherein said tumor is a HER2/neu positive tumor and wherein said cancer is a HER2/neu-expressing cancer.

35. The method of claim 19, wherein said cancer is osteosarcoma, ovarian cancer, gastric cancer, central nervous system (CNS) cancer, or Ewing's sarcoma (ES).

36. The method of claim 35, wherein said osteosarcoma cancer is a canine osteosarcoma.

37. The method of claim 19, wherein said osteosarcoma is a pediatric osteosarcoma.

38. The method of claim 19, wherein said immune response against said HER2/neu-expressing tumor or cancer comprises an immune response to a subdominant epitope of said HER2/neu protein.

CLAIMS

1. The use of a composition in the manufacture of a medicament for treating a HER2/neu-expressing tumor growth or cancer in a subject, wherein the composition comprising a recombinant attenuated *Listeria* comprising nucleic acid encoding a recombinant polypeptide, wherein said recombinant polypeptide comprises a HER2/neu chimeric antigen fused to an additional polypeptide, wherein said nucleic acid molecule comprises a first open reading frame encoding said recombinant polypeptide, wherein said nucleic acid molecule further comprises a second open reading frame encoding a metabolic enzyme, and wherein said metabolic enzyme complements an endogenous gene that is mutated in the chromosome of said recombinant *Listeria* strain.

2. The use of a composition of claim 1, wherein said composition comprises a *Listeria* dose of about 3.3×10^9 *Listeria*.

3. The use of a composition of claim 1, wherein said subject is a human or a canine subject.

4. The use of a composition of claim 3, wherein said human subject is a child, an adolescent or an adult.

5. The use of a composition of claim 1, wherein administering said fusion polypeptide to said subject prevents escape mutations within said tumor.

6. The use of a composition of claim 1, wherein said HER2/neu chimeric antigen is a human chimeric HER2/neu comprising at least 5, 9, 13, 14, or 17 of the mapped human MHC-class I epitopes.

7. The use of a composition of claim 1, wherein said chimeric HER2/neu is a chimeric canine HER2/neu.

8. The use of a composition of claim 1, wherein said nucleic acid molecule is integrated into the *Listeria* genome.

9. The use of a composition of claim 1, wherein said nucleic acid molecule is in a plasmid in said recombinant *Listeria* vaccine strain and wherein said plasmid is stably maintained in said recombinant *Listeria* vaccine strain in the absence of antibiotic selection.

10. The use of a composition of claim 1, wherein said recombinant *Listeria* comprises a mutation in the actA virulence gene.

11. The use of a composition of claim 1, wherein said additional polypeptide is selected from the group consisting of: a) non-hemolytic LLO protein or N-terminal fragment, b) a PEST sequence, or c) an ActA fragment.

12. The use of a composition of claim 1, wherein said metabolic enzyme encoded by said second open reading frame is an alanine racemase enzyme or a D-amino acid transferase enzyme.

13. The use of a composition of claim 1, further comprising an independent adjuvant.

14. The use of a composition of claim 12, wherein said adjuvant comprises a granulocyte/macrophage colony-stimulating factor (GM-CSF) protein, a nucleotide molecule encoding a GM-CSF protein, saponin QS21, monophosphoryl lipid A, or an unmethylated CpG-containing oligonucleotide.

15. The use of a composition of claim 1, wherein said tumor is a HER2/neu positive tumor and wherein said cancer is a HER2/neu-expressing cancer.

16. The use of a composition of claim 1, wherein said cancer is osteosarcoma, ovarian cancer, gastric cancer, central nervous system (CNS) cancer, or Ewing's sarcoma (ES).

17. The use of a composition of claim 16, wherein said osteosarcoma cancer is a canine osteosarcoma.

18. The use of a composition of claim 16, wherein said osteosarcoma is a pediatric osteosarcoma.

19. The use of a composition in the manufacture of a medicament for eliciting an enhanced immune response against a HER2/neu-expressing tumor growth or cancer in a subject, wherein the composition comprising a recombinant attenuated *Listeria* strain comprising a nucleic acid encoding a recombinant polypeptide, wherein said fusion polypeptide comprises a HER2/neu chimeric antigen fused to an additional polypeptide, wherein said nucleic acid molecule comprises a first open reading frame encoding said

recombinant polypeptide, wherein said nucleic acid molecule further comprises a second open reading frame encoding a metabolic enzyme, and wherein said metabolic enzyme complements an endogenous gene that is mutated in the chromosome of said recombinant *Listeria* strain.

20. The use of a composition of claim 19, wherein said composition comprises a *Listeria* dose of about 3.3 x 10^9 *Listeria*.

21. The use of a composition of claim 19, wherein said subject is a human or a canine subject.

22. The use of a composition of claim 21, wherein said human subject is a child, an adolescent or an adult.

23. The use of a composition of claim 19, wherein administering said fusion polypeptide to said subject having a Her2/neu-expressing tumor prevents escape mutations within said tumor.

24. The use of a composition of claim 19, wherein said HER2/neu chimeric antigen is a human chimeric HER2/neu comprising at least 5, 9, 13, 14, or 17 of the mapped human MHC-class I epitopes.

25. The use of a composition of claim 19, wherein said chimeric HER2/neu is a chimeric canine HER2/neu.

26. The use of a composition of claim 19, wherein said nucleic acid molecule is integrated into the *Listeria* genome.

27. The use of a composition of claim 19, wherein said nucleic acid molecule is in a plasmid in said recombinant *Listeria* vaccine strain.

28. The use of a composition of claim 19, wherein said plasmid is stably maintained in said recombinant *Listeria* vaccine strain in the absence of antibiotic selection.

29. The use of a composition of claim 19, wherein said recombinant *Listeria* comprises a mutation in the actA virulence gene.

30. The use of a composition of claim 19, wherein said additional polypeptide is selected

from the group consisting of: a) non-hemolytic LLO protein or N-terminal fragment, b) a PEST sequence, or c) an ActA fragment.

31. The use of a composition of claim 19, wherein said metabolic enzyme encoded by said second open reading frame is an alanine racemase enzyme or a D-amino acid transferase enzyme.

32. The use of a composition of claim 19, further comprising an independent adjuvant.

33. The use of a composition of claim 32, wherein said adjuvant comprises a granulocyte/macrophage colony-stimulating factor (GM-CSF) protein, a nucleotide molecule encoding a GM-CSF protein, saponin QS21, monophosphoryl lipid A, or an unmethylated CpG-containing oligonucleotide.

34. The use of a composition of claim 19, wherein said tumor is a HER2/neu positive tumor and wherein said cancer is a HER2/neu-expressing cancer.

35. The use of a composition of claim 19, wherein said cancer is osteosarcoma, ovarian cancer, gastric cancer, central nervous system (CNS) cancer, or Ewing's sarcoma (ES).

36. The use of a composition of claim 35, wherein said osteosarcoma cancer is a canine osteosarcoma.

37. The use of a composition of claim 19, wherein said osteosarcoma is a pediatric osteosarcoma.

38. The use of a composition of claim 19, wherein said immune response against said HER2/neu-expressing tumor or cancer comprises an immune response to a subdominant epitope of said HER2/neu protein.