What is claimed is:

1. Use of an anti-PD-L1 antibody, or antigen binding fragment thereof, and an Epidermal Grow Factor Receptor (EGFR) tyrosine kinase inhibitor, in the manufacture of a medicament for the treatment of non-small cell lung cancer (NSCLC) in a human patient, wherein the anti-PD-L1 antibody, or the antigen binding fragment thereof, is to be administered to the patient at a dosage from about 3 mg/kg to about 10 mg/kg every 2 weeks and the EGFR tyrosine kinase inhibitor is to be administered at about 250 mg per day.

2. Use of an anti-PD-L1 antibody, or antigen binding fragment thereof, and an EGFR tyrosine kinase inhibitor, in the manufacture of a medicament for the treatment of non-small cell lung cancer (NSCLC) in a human patient, wherein the anti-PD-L1 antibody, or the antigen binding fragment thereof, is to be administered to the patient at a dosage of about 3 mg/kg or about 10 mg/kg every 2 weeks and the EGFR tyrosine kinase inhibitor is to be administered at about 250 mg per day.

3. Use of an anti-PD-L1 antibody, or antigen binding fragment thereof, and an EGFR tyrosine kinase inhibitor, in the manufacture of a medicament for the treatment of non-small cell lung cancer (NSCLC) in a human patient identified as having a non-small cell lung cancer that is positive for an EGFR activating mutation, wherein the anti-PD-L1 antibody, or the antigen binding fragment thereof, is to be administered to the patient at a dosage from about 3 mg/kg to about 10 mg/kg every 2 weeks and the EGFR tyrosine kinase inhibitor is to be administered at about 250 mg per day.

4. Use of an anti-PD-L1 antibody, or antigen binding fragment thereof, and an EGFR tyrosine kinase inhibitor, in the manufacture of a medicament for the treatment of non-small cell lung cancer (NSCLC) in a human patient identified as having a non-small cell lung cancer that is positive for an EGFR activating mutation, wherein the anti-PD-L1 antibody, or the antigen binding fragment thereof, is to be administered to the patient at a dosage of about 3 mg/kg or about 10 mg/kg every 2 weeks and the EGFR tyrosine kinase inhibitor is to be administered at about 250 mg per day.

5. The use of any one of claims 1-4, wherein the anti-PD-L1 antibody has one or more of a heavy chain CDR1 comprising the amino acid sequence GFTFSRYWMS (SEQ ID NO: 3);

heavy chain CDR2 comprising the amino acid sequence NIKQDGSEKYYVDSVKG (SEQ ID NO: 4); heavy chain CDR3 comprising the amino acid sequence EGGWFGELAFDY (SEQ ID NO: 5); light chain CDR1 comprising the amino acid sequence RASQRVSSSYLA (SEQ ID NO: 6); light chain CDR2 comprising the amino acid sequence DASSRAT (SEQ ID NO: 7); and light chain CDR3 comprising the amino acid sequence QQYGSLPWT (SEQ ID NO: 8).

6. The use of any one of claims 1-4, wherein the anti-PD-L1 antibody has one or more of a light chain comprising the amino acid sequence:
EIVLTQSPGTLSLSPGERATLSCRASQRVSSSYLAWYQQKPGQAPRLLIYDASSRATGIPD
RFSGSGSGTDFTLTISRLEPEDFAVYYCQQYGSLPWTFGQGTKVEIK (SEQ ID NO: 1)
and a heavy chain comprising the amino acid sequence:
EVQLVESGGGLVQPGGSLRLSCAASGFTFSRYWMSWVRQAPGKGLEWVANIKQDGSE
KYYVDSVKGRFTISRDNAKNSLYLQMNSLRAEDTAVYYCAREGGWFGELAFDYWGQG
TLVTVSS (SEQ ID NO:2).

7. The use of any one of claims 1-6, wherein the anti-PD-L1 antibody is selected from MEDI4736, MPDL3280A, BMS-936559, and MSB0010718C.

8. The use of any one of claims 1-6, wherein the EGFR tyrosine kinase inhibitor is one or more of gefitinib, erlotinib, icotinib, afatinib, dacomitinib, neratinib, rociletinib, and AZD9291.

9. Use of MEDI4736, or an antigen binding fragment thereof, and gefitinib, in the manufacture of a medicament for the treatment of non-small cell lung cancer (NSCLC) in a human patient identified as having a non-small cell lung cancer that is positive for an EGFR activating mutation, wherein the MEDI4736, or the antigen binding fragment thereof, is to be administered at a dosage from about 3 mg/kg to about 10 mg/kg every 2 weeks and the gefitinib is to be administered at 250 mg per day.

10. The use of claim any one of claims 1-9, wherein the non-small cell lung cancer is selected from the group consisting of squamous cell carcinoma, adenocarcinoma, large cell carcinoma, adenosquamous carcinoma and sarcomatoid carcinoma.

11. The use of any one of claims 1-10, wherein the anti-PD-L1 antibody or MEDI4736 is to be administered at 3 mg/kg every 2 weeks.

12. The use of any one of claims 1-10, wherein the anti-PD-L1 antibody or MEDI4736 is to be administered at 10 mg/kg every 2 weeks.

13. The use of any one of claims 1-12, wherein the anti-PD-L1 antibody or MEDI4736 and gefitinib are to be administered for 8 weeks, 12 weeks, 16 weeks, 20 weeks or more.

14. The use of any one of claims 1-13, wherein the use stabilizes or decreases one or more of tumor diameter, tumor volume, tumor mass, and tumor burden.

15. The use of any one of claims 3-14, wherein the EGFR activating mutation is in the EGFR kinase domain.

16. The use of claim 15, wherein the activating mutation is a deletion in the EGFR kinase domain.

17. The use of claim 16, wherein the deletion comprises amino acids at positions 746-750 (ELREA) (SEQ ID NO: 13) of an EGFR polypeptide.

18. The use of claim 16, wherein the deletion is in a region encoded by exon 19 of an EGFR nucleic acid molecule.

19. The use of any one of claims 1-18, wherein the anti-PD-L1 antibody or MEDI4736, or the antigen-binding fragment thereof, is to be administered by intravenous infusion.

20. The use of any one of claims 1-18, wherein the EGFR tyrosine kinase inhibitor or gefitinib is to be administered orally.

21. The use of any one of claims 1-18, wherein the patient is identified as responsive to treatment with an EGFR tyrosine kinase inhibitor.

22. The use of any one of claims 1-18, wherein the patient is undergoing or has undergone treatment with an EGFR tyrosine kinase inhibitor or gefitinib.

23. The use of any one of claims 1-18, wherein the EGFR polypeptide comprises a methionine at position 790.

24. The use of any one of claims 1-18, wherein the use increases overall survival as compared to the administration of either EGFR tyrosine kinase inhibitor or gefitinib alone.

25. The use of any one of claims 1-18, wherein the anti-PD-L1 antibody, MEDI4736, or the antigen binding fragment thereof, is to be administered before, during, or after administration of gefitinib.

26. The use of any one of claims 1-18, wherein the anti-PD-L1 antibody, MEDI4736, or the antigen binding fragment thereof, is to be administered concurrently with gefitinib.