What is claimed is:

1. Use of a) a human anti-PD-L1 antibody or an antigen binding fragment thereof, b) etoposide and a platinum-based therapeutic agent (EP) in the manufacture of a medicament for extending progression-free survival (PFS) in a patient with extensive-stage small cell lung cancer (ES-SCLC), wherein the human anti-PD-L1 antibody or antigen binding fragment thereof comprising:

a VH CDR1 having the amino acid sequence of SEQ ID NO: 3,

a VH CDR2 having the amino acid sequence of SEQ ID NO: 4,

a VH CDR3 having the amino acid sequence of SEQ ID NO: 5,

a VL CDR1 having the amino acid sequence of SEQ ID NO: 6,

a VL CDR2 having the amino acid sequence of SEQ ID NO: 7, and

a VL CDR3 having the amino acid sequence of SEQ ID NO: 8; and

wherein PFS is increased by at least about five months versus treatment with EP alone.

2. The use of claim 1, wherein the platinum-based therapeutic agent comprises cisplatin and/or carboplatin.

3. The use of claim 1, wherein the human anti-PD-L1 antibody or antigen binding fragment thereof comprises a light chain variable domain comprising the amino acid sequence of SEQ ID NO: 1 and a heavy chain variable domain comprising the amino acid sequence of SEQ ID NO: 2.

4. The use of claim 1, wherein the human anti-PD-L1 antibody is durvalumab.

5. The use of claim 1, wherein the human anti-PD-L1 antibody is to be administered as a fixed dose of 1500 mg, intravenously, every three weeks (Q3W) or as a dose of 20 mg/kg, intravenously, Q3W.

6. The use of claim 5, wherein the use comprises 4 cycles of administration of the human anti-PD-L1 antibody.

7. The use of claim 5 or 6, wherein EP is to be administered as a dose comprising 80-100 mg/m^2 etoposide and carboplatin area under the curve 5-6 mg/mL/min or cisplatin 75-80 mg/m^2, intravenously, per dose of human anti-PD-L1 antibody.

8. The use of any one of claims 5-7, wherein 1500 mg human anti-PD-L1 antibody is to be administered, intravenously, Q4W after completion of 4 cycles of Q3W.

9. The use of any one of claims 5-7, wherein a human anti-CTLA-4 antibody is to be administered, intravenously, Q3W, wherein the human anti-CTLA-4 antibody is tremelimumab.

10. The use of claim 9, wherein tremelimumab is to be administered as a fixed dose of 75 mg or as a dose of 1 mg/kg.

11. The use according to any of the preceding claims, wherein prophylactic cranial irradiation is to be administered to the patient.

12. The use according to any of the preceding claims, wherein the medicament includes a human anti-PD-1 antibody, wherein the human anti-PD-1 antibody comprises pembrolizumab (KEYTRUDA®) or nivolumab (OPDIVO®).

13. Use of a) a human anti-PD-L1 antibody or an antigen binding fragment thereof, b) etoposide and a platinum-based therapeutic agent (EP) in the manufacture of a medicament for extending overall survival (OS) in a patient with extensive-stage small cell lung cancer (ES-SCLC), wherein the human anti-PD-L1 antibody or antigen binding fragment thereof comprising:

a VH CDR1 having the amino acid sequence of SEQ ID NO: 3,
a VH CDR2 having the amino acid sequence of SEQ ID NO: 4,
a VH CDR3 having the amino acid sequence of SEQ ID NO: 5,
a VL CDR1 having the amino acid sequence of SEQ ID NO: 6,
a VL CDR2 having the amino acid sequence of SEQ ID NO: 7, and
a VL CDR3 having the amino acid sequence of SEQ ID NO: 8; and

wherein OS is extended by at least about three months versus treatment with EP alone.

14. The use of claim 13, wherein the platinum-based therapeutic agent comprises cisplatin and/or carboplatin.

15. The use of claim 13, wherein the human anti-PD-L1 antibody or antigen binding fragment thereof comprises a light chain variable domain comprising the amino acid sequence of SEQ ID NO: 1 and a heavy chain variable domain comprising the amino acid sequence of SEQ ID NO: 2.

16. The use of claim 13, wherein the human anti-PD-L1 antibody is durvalumab.

17. The use of claim 13, wherein the human anti-PD-L1 antibody is to be administered as a fixed dose of 1500 mg, intravenously, Q3W or as a dose of 20 mg/kg, intravenously, Q3W.

18. The use of claim 17, wherein the use comprises 4 cycles of administration of the human anti-PD-L1 antibody.

19. The use of claim 17 or 18, wherein EP is to be administered as a dose comprising 80-100 mg/m^2 etoposide and carboplatin area under the curve 5-6 mg/mL/min or cisplatin 75-80 mg/m^2, intravenously, per dose of human anti-PD-L1 antibody.

20. The use of any one of claims 17-19, wherein 1500 mg human anti-PD-L1 antibody is to be administered, intravenously, Q4W after completion of 4 cycles of Q3W.

21. The use of any one of claims 17-19, wherein a human anti-CTLA-4 antibody is to be administered, intravenously, Q3W, wherein the human anti-CTLA-4 antibody is tremelimumab.

22. The use of claim 21, wherein tremelimumab is to be administered as a fixed dose of 75 mg or as a dose of 1 mg/kg.

23. The use according to any one of claims 13-22, wherein prophylactic cranial irradiation is to be administered to the patient.

24. The use according to any one of claims 13-23, wherein the medicament includes a human anti-PD-1 antibody, wherein the human anti-PD-1 antibody comprises pembrolizumab (KEYTRUDA®) or nivolumab (OPDIVO®).

25. Use of a) a human anti-PD-L1 antibody or an antigen binding fragment thereof, b) etoposide and a platinum-based therapeutic agent (EP) in the manufacture of a medicament for improving overall response rate (ORR) in a patient with extensive-stage small cell lung cancer (ES-SCLC), wherein the human anti-PD-L1 antibody or antigen binding fragment thereof comprising:

a VH CDR1 having the amino acid sequence of SEQ ID NO: 3,
a VH CDR2 having the amino acid sequence of SEQ ID NO: 4,
a VH CDR3 having the amino acid sequence of SEQ ID NO: 5,
a VL CDR1 having the amino acid sequence of SEQ ID NO: 6,
a VL CDR2 having the amino acid sequence of SEQ ID NO: 7, and
a VL CDR3 having the amino acid sequence of SEQ ID NO: 8; and
wherein ORR is increased by at least 10% versus treatment with EP alone.

26. The use of claim 25, wherein the platinum-based therapeutic agent comprises cisplatin and/or carboplatin.

27. The use of claim 25, wherein the human anti-PD-L1 antibody comprises a light chain variable domain comprising the amino acid sequence of SEQ ID NO: 1 and a heavy chain variable domain comprising the amino acid sequence of SEQ ID NO: 2.

28. The use of claim 25, wherein the human anti-PD-L1 antibody is durvalumab.

29. The use of claim 25, wherein the human anti-PD-L1 antibody is to be administered as a fixed dose of 1500 mg, intravenously, Q3W or as a dose of 20 mg/kg, intravenously, Q3W.

30. The use of claim 29, wherein the use comprises 4 cycles of administration of the human anti-PD-L1 antibody.

31. The use of claim 29 or 30, wherein EP is to be administered as a dose comprising 80-100 mg/m^2 etoposide and carboplatin area under the curve 5-6 mg/mL/min or cisplatin 75-80 mg/m^2, intravenously, per dose of human anti-PD-L1 antibody.

32. The use of any one of claims 29-31, wherein 1500 mg human anti-PD-L1 antibody is to be administered, intravenously, Q4W after completion of 4 cycles of treatment.

33. The use of any one of claims 29-31, wherein a human anti-CTLA-4 antibody is to be administered, intravenously, Q3W wherein the human anti-CTLA-4 antibody is tremelimumab.

34. The use of claim 33, wherein tremelimumab is to be administered as a fixed dose of 75 mg or as a dose of 1 mg/kg.

35. The use according to any one of claims 25-34, wherein prophylactic cranial irradiation is to be administered to the patient.

36. The use according to any one of claims 25-35, wherein the medicament includes a human anti-PD-1 antibody, wherein the human anti-PD-1 antibody comprises pembrolizumab (KEYTRUDA®) or nivolumab (OPDIVO®).