WHAT IS CLAIMED IS:

1. A pharmaceutical composition, comprising:

tucaresol, or a pharmaceutically acceptable salt thereof; and

one or more immune checkpoint inhibitor each independently an inhibitor of PD-1, PD-L1, PD-L2, or CLTA-4.

2. The pharmaceutical composition of claim 1, wherein the immune checkpoint inhibitor is a PD-1 inhibitor.

3. The pharmaceutical composition of claim 1, wherein the immune checkpoint inhibitor is a PD-L1 inhibitor.

4. The pharmaceutical composition of claim 1, wherein the immune checkpoint inhibitor is a PD-L2 inhibitor.

5. The pharmaceutical composition of claim 1, wherein the immune checkpoint inhibitor is a CTLA-4 inhibitor.

6. The pharmaceutical composition of any one of claims 1 to 5, comprising a first immune checkpoint inhibitor and a second immune checkpoint inhibitor, wherein the first immune checkpoint inhibitor is different from the second immune checkpoint inhibitor.

7. The pharmaceutical composition of claim 6, wherein the first immune checkpoint inhibitor is a PD-1 inhibitor, and the second immune checkpoint inhibitor is a CTLA-4 inhibitor.

8. The pharmaceutical composition of claim 6, wherein the first immune checkpoint inhibitor is a PD-L1 inhibitor, and the second immune checkpoint inhibitor is a CTLA-4 inhibitor.

9. The pharmaceutical composition of claim 6, wherein the first immune checkpoint inhibitor is a PD-L2 inhibitor, and the second immune checkpoint inhibitor is a CTLA-4 inhibitor.

10. The pharmaceutical composition of any one of claims 1 to 9, wherein the immune checkpoint inhibitor is an antibody.

11. The pharmaceutical composition of claim 10, wherein the immune checkpoint inhibitor is a PD-1 antibody.

12. The pharmaceutical composition of claim 10, wherein the immune checkpoint inhibitor is a PD-L1 antibody.

13. The pharmaceutical composition of claim 10, wherein the immune checkpoint inhibitor is a PD-L2 antibody.

14. The pharmaceutical composition of claim 10, wherein the immune checkpoint inhibitor is a CTLA-4 antibody.

15. The pharmaceutical composition of claim 10, wherein the antibody is α-CTLA4-PE-Cy7, or α-PD1-APC.

16. The pharmaceutical composition of any one of claims 1 to 15, further comprising one or more additional chemotherapeutic agent.

17. The pharmaceutical composition of any one of claims 1 to 16, further comprising one or more pharmaceutically acceptable excipients.

18. The pharmaceutical composition of any one of claims 1 to 17, further comprising plinabulin.

19. Use of a pharmaceutical composition of any one of claims 1 to 18 in the manufacture of a medicament for treating cancer.

20. Use of tucaresol, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for administration in combination with one or more immune checkpoint inhibitor for treating cancer, wherein the one or more immune checkpoint inhibitor is each independently an inhibitor of PD-1, PD-L1, PD-L2, or CTLA-4.

21. The use of claim 20, wherein the medicament is for use in combination with one or more additional chemotherapeutic agent.

22. The use of any one of claims 19 to 21, wherein the cancer comprises cancer cells expressing a binding ligand of PD-1.

23. The use of claim 22, wherein the binding ligand of PD-1 is PD-L1 or PD-L2.

24. The use of claim 22, wherein the cancer is head and neck cancer, lung cancer, stomach cancer, colon cancer, pancreatic cancer, prostate cancer, breast cancer, kidney cancer, bladder cancer, ovary cancer, cervical cancer, melanoma, glioblastoma, myeloma, lymphoma, or leukemia.

25. The use of claim 22, wherein the cancer is renal cell carcinoma, malignant melanoma, non-small cell lung cancer (NSCLC), ovarian cancer, Hodgkin's lymphoma or squamous cell carcinoma.

26. The use of any one of claims 19 to 25, wherein the cancer comprises cancer cells expressing a binding ligand of CTLA-4.

27. The use of claim 26, wherein the binding ligand of CTLA-4 is B7.1 or B7.2.

28. The use of any one of claims 19 to 27, wherein the immune checkpoint inhibitor is a PD-1 inhibitor.

29. The use of any one of claims 19 to 27, wherein the immune checkpoint inhibitor is a PD-L1 inhibitor.

30. The use of any one of claims 19 to 27, wherein the immune checkpoint inhibitor is a PD-L2 inhibitor.

31. The use of any one of claims 19 to 27, wherein the immune checkpoint inhibitor is a CTLA-4 inhibitor.

32. The use of any one of claims 19 to 31, wherein the immune checkpoint inhibitor is nivolumab, pembrolizumab, pidilizumab, ipilimumab, dacarbazine, BMS 936559, atezolizumab, durvalimumab, or any combination thereof.

33. Use of tucaresol, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for administration in combination with one or more immune checkpoint inhibitor and plinabulin for treating cancer, wherein the one or more immune checkpoint inhibitor is each independently an inhibitor of PD-1, PD-L1, PD-L2, or CTLA-4.

34. The use of claim 33, wherein the cancer is selected from breast cancer, colon cancer, rectal cancer, lung cancer, prostate cancer, melanoma, leukemia, ovarian cancer, gastric cancer, renal cell carcinoma, liver cancer, pancreatic cancer, lymphomas and myeloma.

35. The use of claim 33 or claim 34, wherein the cancer is a solid tumor or hematological cancer.

36. The use of any one of claims 33 to 35, wherein the cancer does not have any cells expressing PD-1, PD-L1, or PD-L2.