CLAIMS

What is claimed is:

1. Use of activated NK cells and an anti-PDL1 antibody in the manufacture of a medicament for treating a cancer or an infection in a subject, wherein the activated NK cells comprise cells obtained by contacting a naïve NK cell population with at least one or more of PM21 particles, EX21 exosomes and FC21 feeder cells.

2. The use of claim 1, wherein the cancer is selected from lymphoma, B cell lymphoma, T cell lymphoma, mycosis fungoides, Hodgkin's Disease, myeloid leukemia, bladder cancer, brain cancer, nervous system cancer, head and neck cancer, squamous cell carcinoma of head and neck, kidney cancer, lung cancers such as small cell lung cancer and non-small cell lung cancer, neuroblastoma/glioblastoma, ovarian cancer, pancreatic cancer, prostate cancer, skin cancer, liver cancer, melanoma, squamous cell carcinomas of the mouth, throat, larynx, and lung, colon cancer, cervical cancer, cervical carcinoma, breast cancer, and epithelial cancer, renal cancer, genitourinary cancer, pulmonary cancer, esophageal carcinoma, head and neck carcinoma, large bowel cancer, hematopoietic cancers; testicular cancer; colon and rectal cancers, prostatic cancer, or pancreatic cancer.

3. The use of claim 1, wherein the infection is a viral, bacterial, fungal, or parasitic infection.

4. The use of any of claims 1-3, wherein the activation of expansion of the naïve NK cells by PM21 particles, EX21 exosomes, or FC21 cells occurs between 1 and 21 days.

5. The use of any of claims 1-3 and 4, wherein the NK cells may be derived from peripheral blood umbilical cord blood, or stem cells.

6. The use of claim 1, wherein the naive NK cells are derived from a NK cell like cell line such as NK92.

7. The use of claim 1, wherein the activated NK cells are used in the manufacture of a first medicament and the anti-PDL1 is used in the manufacture of a second medicament.

8. The use of claim 1, wherein the activated NK cells and the anti-PDL1 antibody are used in the manufacture of a medicament comprising the activated NK cells and the anti-PDL1 antibody.

9. The use of claim 1, wherein the naïve NK cells are autologous, haploidentical, or allogeneic NK cells.

10. The use of claim 1, wherein the activated NK cells comprise NK cells further contacted ex vivo with one or more of IL-12, IL-15, and IL-18.

11. The use of claim 10, wherein the one or more of IL-12, IL-15, and IL-18 are used in the manufacture of the medicament comprising the activated NK cells and the anti-PDL1 antibody.

12. The use of claim 10, wherein the IL-12, IL-15, and/or IL-18 are used in the manufacture of a second medicament for separate administration of a first medicament comprising the activated NK cells and the anti-PDL1 antibody, and the second medicament comprising the IL-12, IL-15, and/or IL-18.

13. The use of claim 12, wherein the second medicament comprising the IL-12, IL-15, and/or IL-18 is prepared to be administered prior to administration of the first medicament comprising the activated NK cells and the anti-PDL-1 antibody.

14. The use of claim 12, wherein the second medicament comprising the IL-12, IL-15, and/or IL-18 is prepared to be administered following administration of the first medicament comprising the activated NK cells and the anti-PDL-1 antibody.

15. The use of claim 1, further comprising the use of PM21 particles, EX21 exosomes, and/or FC21 cells in the manufacture of a medicament for treating the cancer or infection in the subject.

16. The use of claim 15, wherein the PM21 particles, EX21 exosomes, and/or FC21 cells used in the manufacture of a medicament comprising the activated NK cells and the anti-PDL-1 antibody.

17. The use of claim 15, wherein the PM21 particles, EX21 exosomes, and/or FC21 cells used in the manufacture of a second medicament prepared for administration separately from the administration of the NK cells.

18. Use of PM21 particles, EX21 exosomes, and/or FC21 cells and an anti-PDL1 antibody in the manufacture of at least one medicament for treating a cancer or an infection in a subject.

19. The use of claim 18, wherein the PM21 particles, EX21 exosomes, and/or FC21 cells are used in the manufacture of a first medicament and the anti-PDL-1 antibody is used

in the manufacture of a second medicament, wherein both the first and second medicament are used to treat the cancer or infection in the subject.

20. The use of claim 18, wherein the PM21 particles, EX21 exosomes, and/or FC21 cells and the anti-PDL1 antibody used in the manufacture of a medicament comprising the PM21 particles, EX21 exosomes, and/or FC21 cells, and the anti-PDL1 antibody.

21. The use of claim 18, further comprising the use of one or more of IL-12, IL-15, and/or IL-18 in the manufacture of at least one medicament to treat the cancer or infection.

22. The use of claim 21, wherein the IL-12, IL-15, and/or IL-18 are used in the manufacture of a medicament comprising i) the PM21 particles, EX21 exosomes, and/or FC21 cells and ii) the anti-PDL-1 antibody.

23. The use of claim 21, wherein the PM21 particles, EX21 exosomes, and/or FC21 cells and the anti-PDL1 antibody are used in the manufacture of a first medicament comprising the PM21 particles, EX21 exosomes, and/or FC21 cells, and the anti-PDL1 antibody, and the IL-12, IL-15, and/or IL-18 are used in the manufacture of a second medicament to be administered to the subject prior to administration of the first medicament.

24. The use of claim 21, wherein the PM21 particles, EX21 exosomes, and/or FC21 cells and the anti-PDL1 antibody are used in the manufacture of a first medicament comprising the PM21 particles, EX21 exosomes, and/or FC21 cells, and the anti-PDL1 antibody, and the IL-12, IL-15, and IL-18 are used in the manufacture of a second medicament to be administered following administration of the first medicament.

25. Use of NK cells activated by contact with PM21 particles, EX21 exosomes, and/or FC21 cells, with an anti-PDL1 antibody in the manufacture of a medicament for anti-cancer or anti-infective therapy.

26. The use of claim 25, wherein the medicament further comprises PM21 particles, EX21 exosomes, and/or FC21 cells.

27. The use of claim 25, further comprising the use of one or more of IL-12, IL-15, and IL-18 in the manufacture of a medicament.