CLAIMS

What is claimed is:

1. A method of treating cancer or an infectious disease in a subject in need thereof, comprising administering a therapeutically effective number of transforming growth factor-beta (TGF-β) Superfamily-Imprinted Natural Killer (TGFβi NK) cells to the subject.

2. The method of claim 1, wherein the subject has an infectious disease.

3. The method of claim 2, wherein the infectious disease is a viral infection.

4. The method of claim 1, wherein the subject has cancer.

5. The method of claim 4, wherein the cancer is a solid tumor.

6. The method of claim 4, wherein the cancer is selected from the group consisting of leukemia, lymphoma, rhabdomyosarcoma, brain cancer, and bone cancer.

7. The method of claim 1, wherein the TGFβi NK cells are resistant to TGF-β.

8. The method of claim 1, wherein the TGFβi NK cells produce increased amounts of one or more of IFN-γ, TNF-α, and GM-CSF.

9. The method of claim 1, wherein the TGFβi NK cells show decreased levels of SMAD3 protein and/or TGFBR3 protein.

10. The method of claim 1, wherein the TGFβi NK cells have a gene expression profile substantially similar to that shown in Figure 12.

11. The method of claim 1, wherein the TGFβi NK cells are administered together with a pharmaceutically acceptable carrier.

12. A natural killer (NK) cell or NK cell line exhibiting increased resistance to a TGF-β superfamily cytokine.

13. The NK cell or cell line of claim 12, wherein the NK cell or cell lines exhibit increased resistance to TGF-β.

14. The NK cell or cell line of claim 12, wherein the NK cells produce increased amounts of one or more of IFN-γ, TNF-α, and GM-CSF.

15. The NK cell or cell line of claim 12, wherein the NK cells show decreased levels of SMAD3 protein and/or TGFBR3 protein.

16. The NK cell or cell line of claim 12, wherein the NK cells have a gene expression profile substantially similar to that shown in Figure 12.

17. The NK cell or cell line of claim 12, wherein the NK cells are prepared by the *in vitro* activation of natural killer cells in the presence of TGF-β.

18. The NK cell or cell line of claim 12, wherein the NK cells are human NK cells.

19. The NK cell or cell line of claim 12, wherein the NK cells are canine NK cells.

20. A method of making a TGF-β-Superfamily Imprinted Natural Killer (TGFβi NK) cell line, comprising the *in vitro* activation of natural killer cells in the presence of a TGF-β-Superfamily cytokine.

21. The method of claim 20, wherein the TGFβi NK cell line is activated in the presence of TGF-β.

22. The method of claim 20, further comprising the *in vitro* activation of natural killer cells in the presence of leukemia feeder cells.

23. The method of claim 22, wherein the feeder cells are K562 feeder cells.

24. The method of claim 23, wherein the K562 feeder cells are genetically modified to express costimulatory proteins and/or cytokines.

25. The method of claim 20, further comprising the *in vitro* activation of natural killer cells in the presence of an NK-stimulating exosome or NK-stimulating nanoparticle.