CLAIMS

1. A method of assaying the potency of ~~an immune~~a therapeutic natural killer (NK) cell, comprising (i) contacting ~~an immune~~the therapeutic NK cell with an effective amount of a plasma membrane particle, a liposome, or an exosome ~~and~~, (ii) detecting the amount of a cytokine produced by the ~~immune~~ therapeutic NK cell of step (i), (iii) comparing the amount of cytokine produced by the therapeutic NK cell of step (i) to the cytokine potency level required for use of a therapeutic NK cell in immunotherapy, thereby showing the effector function of the therapeutic NK cell; and (iv) selecting a potent therapeutic NK cell of step (iii) based on the amount of cytokine detected in step (ii), wherein the plasma membrane particles or exosomes are purified from feeder cells that stimulate NK cells.

~~2. The method of claim 1, further comprising the step of comparing the amount of cytokine produced to the cytokine potency level required for use of the immune cell in immunotherapy.~~

~~3~~2. The method of claim 1, wherein the amount of a plurality of cytokines is determined.

~~4. The method of claim 1, wherein the immune cell is a T cell, a macrophage, a Natural Killer (NK) cell, NK T cell, chimeric antigen receptor (CAR) T cell, or CAR NK cell.~~

~~5. The method of claim 1, wherein the immune cell is an NK cell.~~

3~~6~~. The method of claim 1, wherein the exosome is a cancer cell exosome.

~~7~~4. The method of claim 1, wherein the amount of cytokine is detected using an immunoassay.

~~8~~5. The method of claim 1, wherein the cytokine is selected from the group comprising interleukin (IL)-2 (IL-2), IL-6, interferon (IFN)-γ (IFN-γ), B cell activating factor/ tumor necrosis factor (TNF) ligand superfamily member 13B (BAFF/TNFSF13B), TNF-α, cluster of differentiation (CD) 163 (CD163), CD30/TNFRSF8, Chitinase 3-like 1, gp130, IFN-a2, IL-6Ra, IL-8, IL-10, IL-11, IL-12(p40), IL-12(p70), IL-20, IL-22, IL-26, IL-29/IFN-l1, IL-32, IL-34, IL-35, matrix metalloproteinase-1 (MMP-1), Osteocalcin, Osteopontin (OPN), Pentraxin-3, tumor necrosis factor (TNF)- receptor 1 (TNF-R1), TNF-R2, thymic stromal lymphopoetin (TSLP), granulocyte-macrophage colony-stimulating factor (GM-CSF), leukemia inhibitory factor (LIF), and the chemokines macrophage inflammatory protein

(MIP) -1α (MIP-1α), MIP-1β, RANTES, and/or TNF-related weak inducer of apoptosis (TWEAK)/TNF superfamily member 12 (TWEAK/TNFSF12).

~~9~~6. The method of claim 1, wherein the ~~immune~~ therapeutic NK cell is contacted with an effective amount of the plasma membrane particle, the liposome, or the exosome for at least 4 hours.

~~10~~7. The method of claim 1, wherein the plasma membrane particle, the liposome, or the exosome is provided at a concentration of 50 μg/mL to 400 μg/mL.

~~11~~8. A kit for assaying the potency of ~~an immune~~a therapeutic NK cell, comprising a container including an effective amount of a plasma membrane particle and/or an exosome and a buffer suitable for therapeutic NK ~~immune~~ cells, wherein the kit further comprises instructions for use according to the method of claim 1.

~~12~~9. The kit of claim ~~11~~8, wherein the plasma membrane particle, the liposome, or the exosome is provided at a concentration of 50 μg/mL to 400 μg/mL.

~~13~~10. The kit of claim ~~11~~8, wherein the container is ~~an Eppendorf~~a microcentrifuge tube.

~~14. The kit of claim 11, wherein the kit further comprises instructions for using the kit to stimulate cytokine production by an immune cell.~~

~~15~~11. A method comprising;

a. performing the method of any of claims 1-~~10~~ 7 *ex vivo* or *in vitro* on multiple ~~immune~~ therapeutic natural killer (NK) cells to determine the potency of each immune cell;

b. selecting ~~at least one~~ potent ~~immune~~ therapeutic NK cells based on the amount of cytokine detected; and

c. preparing a therapeutically effective amount of the potent therapeutic NK~~immune~~ cells ~~to be administered~~suitable for administration to a subject in need thereof as an immunotherapeutic.

~~16. The method of claim 15, further comprising extracting the multiple immune cells from an allogeneic or autologous donor prior to assaying the potency of the immune cell.~~

~~17~~2. The method of claim ~~15~~11, further comprising expanding ~~the~~ at least one potent therapeutic NK~~immune~~ cell prior to preparing a therapeutically effective amount of the potent therapeutic NK~~immune~~ cell.

~~18. The method of claim 15, further comprising directing the multiple immune cells or the potent immune cell to respond to a specified antigen.~~

~~19. The method of claim 18, further comprising genetically altering the multiple immune cells or the potent immune cell to present a chimeric antigen receptor.~~

13~~20~~. Use of at least one potent therapeutic NK~~immune~~ cell ~~obtained~~ selected by the method of any one of claims 1-~~10~~ 7 for the manufacture of a medicament for treating, inhibiting, reducing, ~~preventing,~~ and/or ameliorating a cancer and/or metastasis in a subject.

~~21~~14. The use according to claim 13~~20~~, wherein the one therapeutic NK ~~or more immune~~ cells is to be obtained from an allogeneic or autologous donor.

~~22. The use according to claim 20, wherein the method of any one of claims 1-10 further comprising extracting multiple immune cells from an allogeneic or autologous donor.~~

~~23. The use according to any of claims 20-22, wherein the immune cell is a T-cell, a macrophage, a Natural Killer (NK) cell, NK T cell, chimeric antigen receptor (CAR) T cell, or CAR NK cell.~~

~~24~~15. The use according to any of claim~~s 20-23~~13 or 14, wherein the medicament comprises expanded potent therapeutic NK~~immune~~ cells.

16. The method of any one of claims 1, 4 or 5, wherein the cytokine is selected from interferon (IFN)-γ (IFN-g) and IL-2.

17. The method of claim 1, wherein the plasma membrane particle or exosome comprises IL-15, IL-21, and/or 4-1BBL on its membrane.