WHAT IS CLAIMED IS:

1. A method of enhancing gammadelta T-cell homing and/or retention potential, the method comprising:
(a) obtaining a selected cell population enriched for gammadelta T-cells;
(b) *ex-vivo* providing said selected cell population with conditions for gammadelta T-cell expansion,
(c) providing nicotinamide in the range of 0.5 to 50 mM for a period of time sufficient for enhancing gammadelta T-cell homing and/or retention potential,
thereby enhancing homing and/or retention potential of gammadelta T-cells in said selected cell population.

2. A method of enhancing gammadelta T-cell CD62L expression, the method comprising:
(a) obtaining a selected cell population enriched for gammadelta T-cells;
(b) *ex-vivo* providing said selected cell population with conditions for gammadelta T-cell expansion,
(c) providing nicotinamide in the range of 0.5 to 50 mM for a period of time sufficient for enhancing gammadelta T-cell CD62L expression,
thereby enhancing CD62L expression of gammadelta T-cells in said selected cell population.

3. The method of claim 1 or 2, wherein said conditions for gammadelta T-cell expansion comprise providing nutrients and cytokines, and, optionally, wherein said cytokines are selected from the group consisting of IL-2, IL-15 and IL-21.

4. The method of any one of claims 1-3, wherein said selected cell population is a lymphocyte cell population enriched for gammadelta T-cells by alphabeta T-cell depletion.

5. The method of claim 4, wherein said selected cell population comprises natural killer (NK) cells and, optionally, wherein the method further comprises providing conditions for NK cell expansion.

6. The method of any one of claims 1-3, wherein said selected cell population is a lymphocyte cell population enriched for gammadelta T-cells by selection of gammadelta T-cells, and, optionally, wherein said selected population is devoid of NK cells.

7. The method of any one of claims 1-6, wherein said population of gammadelta T-cells is derived from an organ selected from the group consisting of a muscle, skin, a bone, a lymph organ, a pancreas, a liver, a gallbladder, a kidney, a digestive tract organ, a respiratory tract organ, a reproductive organ, a urinary tract organ, a blood-associated organ, a thymus, a spleen, a nervous system organ.

8. The method of any one of claims 1-6, wherein said population of gammadelta T-cells is derived from a source selected from the group consisting of hematopoietic cells, umbilical cord blood cells, mobilized peripheral blood cells and bone marrow cells.

9. The method of any one of claims 1-8, wherein said population of gammadelta T-cells is from a mononuclear cell fraction or an apheresis sample.

10. The method of any one of claims 1-9, wherein said period of time of step (c) is between 1 and 3 weeks, optionally between 1 and 7 days.

11. The method of any one of claims 1-10, wherein said nicotinamide is provided at a concentration of 5mM, optionally 7 mM.

12. The method of claim 1, further comprising selecting a gammadelta T-cell population according to a cell marker selected from the group consisting of a tumor antigen, a viral antigen and a bacterial antigen.

13. A therapeutic cell composition comprising an expanded selected gammadelta T-cell population, said expanded cell population *ex-vivo* cultured with conditions for gammadelta T-cell expansion and amount of nicotinamide in the range of 0.5-50 mM, wherein said expanded selected gammadelta T-cell population is characterized by at least one of:

(i) enhanced gammadelta T-cell homing and/or retention potential, and

(ii) enhanced expression of CD62L,

as compared to a similar selected gammadelta T-cell population expanded with identical conditions and no more than 0.1 mM nicotinamide, and optionally, wherein said therapeutic cell composition further comprises NK cells.

14. An *ex-vivo* expanded gammadelta T-cell population for use in adoptive cell immunotherapy in a human subject, wherein said gammadelta T-cell population is produced by*ex-vivo* expanding a selected gammadelta T-cell population by culturing said cell population conditions for gammadelta T-cell expansion and nicotinamide in the range of 0.5-50 mM for a period of time sufficient for enhancing gammadelta T-cell homing and/or retention potential and/or CD62L expression, wherein said expanded selected gammadelta T-cell population is characterized by at least one of:

(i) enhanced gammadelta T-cell homing and/or retention potential, and

(ii) enhanced CD62L expression,

as compared to a similar selected gammadelta T-cell population expanded without 0.5-50 nM nicotinamide, and

wherein said immunotherapy comprises infusing the expanded gammadelta T-cells into said subject in need thereof.

15. The *ex-vivo* expanded gammadelta T-cell population for use of claim 14, wherein said gammadelta T-cells are allogeneic to said subject.

16. The *ex-vivo* expanded gammadelta T-cell population for use of claim 14, wherein said gammadelta T-cells are autologous to said subject.

17. The *ex-vivo* expanded gammadelta T-cell population for use of claim 14, wherein said subject is suffering from a condition selected from the group consisting of a cancer, a bacterial infection, a viral infection, an autoimmune condition and an inflammatory condition.

18. The *ex-vivo* expanded gammadelta T-cell population for use of claim 17, wherein infusion of said cells in said subject comprises an adjunct therapy and optionally, wherein said adjunct therapy is in combination with a therapy selected from the group consisting of anti-viral therapy, anti-inflammatory therapy, antibiotic therapy, bactericidal therapy, chemotherapy, surgery, immunotherapy, immunochemotherapy, radiotherapy, bone marrow transplantation and hematopoietic stem cell transplantation.

19. The *ex-vivo* expanded gammadelta T-cell population for use of claim 18, wherein said subject is being treated with umbilical cord blood hematopoietic stem cells expanded in culture with greater than 1.0 mM nicotinamide prior to, concomitantly with or following transplantation of said expanded gammadelta T-cells.