

CLAIMS

1. A method of selecting a sample comprising T cells for adoptive immunotherapy, the method comprising determining the expression of granzyme B by total lymphocytes in the sample and selecting the sample for adoptive immunotherapy if at least 5% of the total lymphocytes in the sample express granzyme B.
2. A method of selecting a sample comprising T cells for inclusion in a cell bank, the method comprising determining the expression of granzyme B by total lymphocytes in the sample and selecting the sample for inclusion in a cell bank if at least 5% of the total lymphocytes in the sample express granzyme B.
3. A method of selecting for adoptive immunotherapy a sample comprising T cells from a library of samples, the method comprising screening the library of samples for the expression of granzyme B by total lymphocytes in the samples and selecting a sample from the library of samples for adoptive immunotherapy in which at least 5% of the total lymphocytes in the sample express granzyme B.
4. A method of selecting for inclusion in a cell bank samples comprising T cells from a library of samples, the method comprising screening the library of samples for the expression of granzyme B by total lymphocytes in the samples and selecting samples for inclusion in a cell bank in which at least 5% of the total lymphocytes in the sample express granzyme B.
5. A method of selecting a sample comprising T cells for ex vivo expansion, comprising:
 - (a) inducing proliferation in T cells from a portion of the sample,
 - (b) determining the expression of granzyme B by the total lymphocytes in the portion of the sample; and
 - (c) selecting the sample for expansion if at least 5% of the total lymphocytes in the sample express granzyme B.
6. The method of claim 5, further comprising selecting the sample for inclusion into a cell bank.

7. The method of claim 5, further comprising selecting the sample for adoptive immunotherapy.
8. The method of any one of claims 1 to 7, wherein the sample is selected if at least 10% of the total lymphocytes in the sample express granzyme B.
9. The method of any one of claims 1 to 7, wherein the sample is selected if at least 15% of the total lymphocytes in the sample express granzyme B.
10. The method of any one of claims 1 to 7, wherein the sample is selected if at least 20% of the total lymphocytes in the sample express granzyme B.
11. The method of any one of the preceding claims, wherein the expression of granzyme B is determined by Fluorescence Activated Cell Sorting (FACS) or ELISpot.
12. The method of any one of claims 1 to 11, wherein the T cells are incubated with antigen-presenting cells to induce proliferation of the T cells before the expression of granzyme B by the total lymphocytes is determined.
13. The method of any one of claims 1 to 12, further comprising determining the expression of CD8 by cells in the sample and selecting the sample if at least 20% of the cells express CD8.
14. The method of claim 13, wherein the sample is selected if at least 25% of the cells express CD8.
15. The method of claim 13, wherein the sample is selected if at least 30% of the cells express CD8.
16. The method of any one of claims 1 to 15, further comprising determining the expression of CD4 by cells in the sample and selecting the sample if at least 10% of the cells express CD4.
17. The method of claim 16, wherein the sample is selected if at least 15% of the cells in the sample express CD4.

18. The method of claim 16, wherein the sample is selected if at least 25% of the cells in the sample express CD4.
19. The method of any one of claims 1 to 18, wherein the selected T cells are stored in a cell bank after selection.
20. The method of any one of claims 1 to 19, wherein the T cells express a TCR specific for an Epstein-Barr Virus (EBV) peptide presented on a class I MHC.
21. The method of claim 20, wherein the EBV peptide comprises any one of a LMP1 peptide, a LMP2A peptide, or an EBNA1 peptide.
22. Use of a composition comprising the T cells of the selected sample of any one of claims 1 to 21 in the manufacture of a medicament for the treatment of cancer in a subject, wherein the treatment comprises selecting a sample comprising T cells for adoptive immunotherapy comprising determining the expression of granzyme B by total lymphocytes in the sample and selecting the sample for adoptive immunotherapy if at least 5% of the total lymphocytes in the sample express granzyme B.
23. The use of claim 22, wherein the cancer is an Epstein-Barr Virus-associated cancer.
24. The use of claim 22 or 23, wherein the subject has nasopharyngeal carcinoma, NK/T cell lymphoma, Epstein-Barr Virus-associated gastric carcinoma, or Epstein-Barr Virus-associated leiomyosarcoma.
25. Use of a composition comprising the T cells of the selected sample of any one of claims 1 to 21 in the manufacture of a medicament for the treatment of post-transplant lymphoproliferative disorder in a subject, wherein the treatment comprises selecting a sample comprising T cells for adoptive immunotherapy comprising determining the expression of granzyme B by total lymphocytes in the sample and selecting the sample for adoptive immunotherapy if at least 5% of the total lymphocytes in the sample express granzyme B.

26. Use of a composition comprising the T cells of the selected sample of any one of claims 1 to 21 in the manufacture of a medicament for the treatment of an autoimmune disorder in a subject.
27. The use of claim 26, wherein the autoimmune disorder is multiple sclerosis, wherein the treatment comprises selecting a sample comprising T cells for adoptive immunotherapy comprising determining the expression of granzyme B by total lymphocytes in the sample and selecting the sample for adoptive immunotherapy if at least 5% of the total lymphocytes in the sample express granzyme B.
28. The use of any one of claims 22 to 27, wherein the T cells are allogeneic to the subject.
29. The use of any one of claims 22 to 28, wherein the T cells are obtained from a cell bank.
30. The use of any one of claims 22 to 27, wherein the T cells are autologous to the subject.
31. The method of any one of claims 1 to 21, wherein the T cells are CD8+ T cells.
32. The method of claim 31, wherein the CD8+ T cells are cytotoxic T lymphocytes (CTLs).
33. The method of claim 32, wherein the CTLs express IFN γ , TNF, IL-2 and CD107.
34. The method of any one of claims 1 to 21, wherein the T cells are CD4+ T cells.