CLAIMS

1. A T lymphocyte expressing: (i) a B cell zone homing receptor not normally expressed by the T lymphocyte, (ii) a skin homing receptor or a gastrointestinal homing receptor, and (iii) a chimeric antigen receptor (CAR).

2. The T lymphocyte of claim 1, wherein the B cell zone homing receptor is CXCR5.

3. The T lymphocyte of claim 1, wherein the B cell homing receptor is encoded by the nucleotide sequence of SEQ ID NO:1 or SEQ ID NO:2, or comprises the amino acid sequence of SEQ ID NO:3 or SEQ ID NO:4.

4. The T lymphocyte of any one of claims 1-3, wherein the T lymphocyte comprises a skin homing receptor.

5. The T lymphocyte of claim 4, wherein the skin homing receptor is CLA, CCR4, or CCR10.

6. The T lymphocyte of any one of claims 1-3, wherein the T lymphocyte comprises a gastrointestinal homing receptor.

7. The T lymphocyte of claim 6, wherein said gastrointestinal homing receptor is integrin α4β7 or CCR9.

8. A T lymphocyte comprising: (i) a B cell zone homing receptor not normally expressed by the T lymphocyte, (ii) a skin homing receptor or a gastrointestinal homing receptor, and (iii) a CAR; wherein said T lymphocyte is for use in the treatment of cancer or a tumor in an individual; wherein said T lymphocyte is to be administered to the individual; and wherein the cancer is a skin cancer, melanoma, squamous cell carcinoma, basal cell carcinoma, splenic marginal zone lymphoma, extranodal marginal zone B cell lymphoma, nodal marginal zone B cell lymphoma, colorectal cancer, stomach cancer, liver cancer, or pancreatic cancer.

9. The T lymphocyte for use according to claim 8, wherein the B cell zone homing receptor is CXCR5.

10. The T lymphocyte for use according to claim 8, wherein the B cell zone homing receptor is encoded by the nucleotide sequence of SEQ ID NO:1 or SEQ ID NO:2, or comprises the amino acid sequence of SEQ ID NO:3 or SEQ ID NO:4.

11. The T lymphocyte for use according to claim 8, wherein the T lymphocyte comprises a skin homing receptor.

12. The T lymphocyte for use according to claim 11, wherein said skin homing receptor is CLA, CCR4, or CCR10.

13. The T lymphocyte for use according to claim 8, wherein the T lymphocyte comprises a gastrointestinal homing receptor.

14. The T lymphocyte for use according to claim 13, wherein said gastrointestinal homing receptor is integrin α4β7 or CCR9.

15. The T lymphocyte of any one of claims 1-3, or the T lymphocyte for use according to any one of claims 8-10, wherein said CAR comprises an extracellular domain, and said extracellular domain binds an antigen selected from the group consisting of: alpha-fetoprotein (AFP), carcinoembryonic antigen (CEA), cancer antigen-125 (CA-125), CA19-9, tyrosinase, melanoma-associated antigen (MAGE), CD19, CD117, protein melan-A (melanoma antigen recognized by T lymphocytes; MART-1), hsp70-2, gp100 (Pmel 17), CA 72-4, and CD22.

16. The T lymphocyte of any one of claims 1, 4, and 5, or the T lymphocyte for use according to any one of claims 8, 11, and 12, wherein said CAR comprises an extracellular domain, and said extracellular domain binds CEA.

17. The T lymphocyte of any one of claims 1, 6, and 7, or the T lymphocyte for use according to any one of claims 8, 13, and 14, wherein said CAR comprises an extracellular domain, and said extracellular domain binds an antigen selected from the group consisting of: CEA, CA125, and CA19-9.

18. The T lymphocyte of claim 17, wherein said extracellular domain binds CEA.