~~WHAT IS~~ CLAIM~~ED I~~S:

1. A method of engineering a cell for antigen presentation to T cells, the method comprising:

a) inducing, enhancing and/or maintaining prolonged survival of a cell *in vitro*;

b) incubating the cell with at least one antigen compound on a continuous basis; and

c) introducing at least one genetic modification within the cell to induce, enhance, maintain and/or modify antigen-presentation by the cell.

2. The method of claim 1, wherein the cell comprises a primary human B cell, optionally wherein the primary human B cell is autologous with respect to the T cells or to a TCR presented by the T cells.

3. The method of claim 2, wherein the primary human B cell is derived from peripheral blood, and/or from a human tissue that contains B cells.

~~4. The method of claim 2, wherein the primary human B cell is derived from a human tissue that contain B cells~~

~~5. The method of claim 4, wherein the human tissues comprise tumor tissue, lymph nodes, spleen, cord blood, body fluids, and bone marrow.~~

~~6.~~4. The method of claim 2, wherein the primary human B cell is obtained by differentiation of a precursor cell, and/or differentiation of induced pluripotent stem cells (iPSCs).

~~7.~~5. The method of claim ~~4~~6, wherein the precursor cell comprises hematopoietic stem cells.

~~8. The method of claim 2, wherein the primary human B cell is obtained by differentiation of induced pluripotent stem cells (iPSC).~~

~~9.~~6. The method of claim 1, wherein the inducing, enhancing and/or maintaining prolonged survival of the cell comprises at least one of: co-culturing the cell with CD40L-expressing feeder cells, infecting the cell with EBV, co-culturing the cell with IL-2, IL-4 and IL-21, expressing CD40L gene in the cell, expressing BCL-6 and BCL2-like 1 genes in the cell, or any combination thereof.

~~10. The method of claim 9, further comprising co-culturing the cell with IL-2, IL-4 and IL-21.~~

~~11. The method of claim 1 or 10, wherein the inducing, enhancing and/or maintaining prolonged survival of the cell comprises expressing BCL-6 and BCL2-like 1 genes in the cell.~~

~~12. The method of claim 1, wherein the inducing, enhancing and/or maintaining prolonged survival of the cell comprises infecting the cell with EBV.~~

~~13. The method of claim 10, 11, or 12, further comprising expressing CD40L gene in the cell.~~

~~14. The method of claim 1, wherein the inducing, enhancing and/or maintaining prolonged survival of the cell comprises expressing BCL-6, BCL2-like 1, and CD40L genes in the cell.~~

~~15. The method of claim 14, wherein the BCL-6, BCL2-like 1, and CD40L genes can be on the same expression construct, or different expression construct.~~

~~16.~~7. The method of claim ~~11, 13, or 14~~6, wherein the genes are introduced into the cell through viral transduction, electroporation, squeezing, transfection, site-specific integration, transposons, CRISPR/Cas9, or TALEN.

~~17.~~8. The method of claim 1, wherein the prolonged survival of the cell is at least three months in cell culture *in vitro*.

~~18.~~9. The method of claim 1, wherein the at least one antigen compound is encoded by one transgene encoding between one and forty polypeptides.

~~19.~~10. The method of claim ~~9~~18, wherein each polypeptide comprises at least eight or nine amino acids.

~~20.~~11. The method of claim 1, wherein the at least one antigen compound is expressed in the cell, and/or is transiently expressed in the cell.

~~21. The method of claim 1, wherein the at least one antigen compound is transiently expressed in the cell.~~

~~22.~~12. An engineered cell, wherein the cell:

a) has been adjusted to induce, enhance and/or maintain its survival *in vitro;*

b) has been incubated with at least one antigen compound; and

c) has at least one genetic modification to induce, enhance, maintain or modify antigen-presentation by the cell.

~~23.~~13. The engineered cell of claim 12~~22~~, wherein adjusted to induce, enhance and/or maintain its survival *in vitro* comprises expressing BCL-6 and BCL2-like 1 genes in the cell, and/or infecting the cell with EBV.

~~24. The engineered cell of claim 22, wherein adjusted to induce, enhance and/or maintain its survival *in vitro* comprises infecting the cell with EBV.~~

~~25.~~14. The engineered cell of claim ~~23 or 24~~13, further comprising expressing CD40L gene in the cell.

~~26. The engineered cell of claim 23 or 25, wherein the genes are introduced into the cell through viral transduction, electroporation, squeezing, transfection, site-specific integration, transposons, CRISPR/Cas9, or TALEN.~~

~~27. The engineered cell of claim 22, wherein the cell survival is at least three months in cell culture *in vitro*.~~

~~28.~~15. The engineered cell of claim 12~~22~~, wherein the at least one antigen compound is encoded by at least one transgene encoding between one and forty polypeptides.

~~29.~~16. The engineered cell of claim 15~~28~~, wherein each polypeptide comprises at least eight amino acids.

~~30.~~17. The engineered cell of claim 12~~22~~, wherein the at least one antigen compound is stably expressed in the cell.

~~31. The engineered cell of claim 22, wherein the at least one antigen compound is transiently expressed in the cell.~~

~~32.~~18. An engineered cell comprising:

a) a nucleotide sequence for expression of a survival factor;

b) a nucleotide sequence for expression of at least one transgene encoding an antigen; and

c) a nucleotide sequence for expression of CD40L.

~~33.~~19. The engineered cell of claim 18~~32~~, wherein the survival factor comprises BCL-6 and/or BCL-XL.

~~34. The engineered cell of claim 32, wherein the at least one transgene encoding an antigen encodes for between one and forty polypeptides.~~

~~35. The engineered cell of claim 34, wherein each polypeptide comprises at least eight amino acids.~~

~~36. The engineered cell of claim 32, wherein the nucleotide sequence for expression of CD40L comprises a gene that provides stable expression of CD40L.~~

~~37.~~20. A primary human B cell to present antigen to T cells, the cell comprising:

a) a nucleotide sequence providing stable expression of BCL-6 and BCL-XL;

b) a nucleotide sequence providing stable expression of between one and forty polypeptides, each polypeptide encoding at least eight amino acids, and each polypeptide being an antigen; and

c) a nucleotide sequence providing stable expression of CD40L.

~~38. A method of antigen presentation, the method comprising:~~

~~inducing, enhancing and/or maintaining prolonged survival of a cell *in vitro;*~~

~~incubating the cell with at least one antigen compound on a continuous basis; and~~

~~introducing at least one genetic modification within the cell to induce, enhance, maintain and/or modify antigen presentation by the cell.~~

~~39. The method of claim 38, wherein the inducing, enhancing and/or maintaining prolonged survival of the cell comprises co-culturing the cell with CD40L-expressing feeder cells.~~

~~40. The method of claim 39, further comprising co-culturing the cell with IL-2, IL-4 and IL-21.~~

~~41. The method of claim 38, wherein the inducing, enhancing and/or maintaining prolonged survival of the cell comprises expressing BCL-6 and BCL2-like 1 genes in the cell.~~

~~42. The method of claim 38, wherein the inducing, enhancing and/or maintaining prolonged survival of the cell comprises infecting the cell with EBV.~~

~~43. The method of claim 41 or 42, further comprising expressing CD40L gene in the cell.~~

~~44. The method of claim 43, wherein the BCL-6, BCL2-like 1, or CD40L gene is introduced into the cell through viral transduction, electroporation, squeezing, transfection, site-specific integration, transposons, CRISPR/Cas9, or TALEN.~~

~~45. The method of claim 38, wherein prolonged survival of the cell is at least three months in cell culture *in vitro*.~~

~~46. The method of claim 38, wherein the at least one antigen compound is encoded by one transgene encoding between one and forty polypeptides.~~

~~47. The method of claim 46, wherein each polypeptide comprises at least eight amino acids.~~

~~48. The method of claim 38, wherein the at least one antigen compound is stably expressed in the cell.~~

~~49. The method of claim 38, wherein the at least one antigen compound is transiently expressed in the cell.~~

~~50. A culturing mix comprising engineered cells according to any one of claims 22-37 and a culturing medium.~~

~~51. The method of claim 20, wherein the antigen compound is expressed from a polynucleotide that is integrated into the cell genome to achieve continuous expression.~~

~~52. The method of claim 20, wherein expression is at an effective level.~~

~~53. The method of claim 20, wherein the antigen is introduced once and that the cells can be expanded afterwards, and used multiple times to assess T cells without a need to deliver the antigen a second time.~~

~~54. The method of any one of the preceding claims involving BCL2-like 1, wherein BCL2-like 1 is BCL-xL.~~

~~55. A method of engineering a cell for antigen presentation, the method comprising:~~

~~a) inducing, enhancing and/or maintaining prolonged survival of a cell *in vitro*;~~

~~b) incubating the cell with at least one antigen compound for a sufficient duration to present antigen on a surface of the cell; and~~

~~c) introducing at least one genetic modification within the cell to induce, enhance, maintain and/or modify antigen-presentation by the cell.~~

~~56. The method of claim 55, wherein the cell comprises a primary human B cell, .~~

~~57. The method of claim 56, wherein the primary human B cell is derived from peripheral blood.~~

~~58. The method of claim 56, wherein the primary human B cell is derived from a human tissue that contain B cells~~

~~59. The method of claim 58, wherein the human tissues comprise tumor tissue, lymph nodes, spleen, cord blood, body fluids, and bone marrow.~~

~~60. The method of claim 56, wherein the primary human B cell is obtained by differentiation of a precursor cell.~~

~~61. The method of claim 60, wherein the precursor cell comprises hematopoietic stem cells.~~

~~62. The method of claim 56, wherein the primary human B cell is obtained by differentiation of induced pluripotent stem cells (iPSC).~~

~~63. The method of any of claims 55 to 62, wherein the inducing, enhancing and/or maintaining prolonged survival of the cell comprises co-culturing the cell with CD40L-expressing feeder cells.~~

~~64. The method of claim 63, further comprising co-culturing the cell with IL-2, IL-4 and IL-21.~~

~~65. The method of any of claims 55 to 62 or 64or 10, wherein the inducing, enhancing and/or maintaining prolonged survival of the cell comprises expressing BCL-6 and BCL2-like 1 genes in the cell.~~

~~66. The method of any of claims 55 to 62, wherein the inducing, enhancing and/or maintaining prolonged survival of the cell comprises infecting the cell with EBV.~~

~~67. The method of claim 64, 65, or 66, further comprising expressing CD40L gene in the cell.~~

~~68. The method of any of claims 55 to 62, wherein the inducing, enhancing and/or maintaining prolonged survival of the cell comprises expressing BCL-6, BCL2-like 1, and CD40L genes in the cell.~~

~~69. The method of claim 68, wherein the BCL-6, BCL2-like 1, and CD40L genes can be on the same expression construct, or different expression construct.~~

70. The method of claim 65, 67, or 68, wherein the genes are introduced into the cell through viral transduction, electroporation, squeezing, transfection, site-specific integration, transposons, CRISPR/Cas9, or TALEN.

71. The method of any of claims 55 to 70, wherein the prolonged survival of the cell is at least three months in cell culture *in vitro*.

72. The method of any of claims 55 to 71, wherein the at least one antigen compound is encoded by one transgene encoding between one and forty polypeptides.

73. The method of claim 72, wherein each polypeptide comprises at least eight or nine amino acids.

74. The method of any of claims 55 to 73, wherein the at least one antigen compound is stably expressed in the cell.

75. The method of any of claims 55 to 73, wherein the at least one antigen compound is transiently expressed in the cell.

76. The method of any of claims 55 to 71, wherein the at least one antigen compound is electroporated into the cell.

77. The method of claim 76, wherein each polypeptide comprises at least eight or nine amino acids.

78. The method of claim 77, wherein the antigen compound is a polypeptide between 8 to 25 amino acids long.

79. The method of claim 78, wherein the polypeptide is 25 amino acids long.

80. The method of any of claims 55-79, wherein the antigen is presented to a T cell.

81. An engineered cell, wherein the cell:

a) has been adjusted to induce, enhance and/or maintain its survival *in vitro;*

b) has been electroporated with at least one antigen compound or has been engineered to express at least one antigen compound; and

c) has at least one genetic modification to induce, enhance, maintain or modify antigen-presentation by the cell.

82. The engineered cell of claim 81, wherein adjusted to induce, enhance and/or maintain its survival *in vitro* comprises expressing BCL-6 and BCL2-like 1 genes in the cell.

83. The engineered cell of claim 81, wherein adjusted to induce, enhance and/or maintain its survival *in vitro* comprises infecting the cell with EBV.

84. The engineered cell of claim 82 or 83, further comprising expressing CD40L gene in the cell.

85. The engineered cell of claim 82 or 84, wherein the genes are introduced into the cell through viral transduction, electroporation, squeezing, transfection, site-specific integration, transposons, CRISPR/Cas9, or TALEN.

86. The engineered cell of any of claims 81 to 85, wherein the cell survival is at least three months in cell culture *in vitro*.

87. The engineered cell of any of claims 81 to 86, wherein has been engineered to express at least one antigen compound comprises at least one transgene encoding between one and forty polypeptides wherein the polypeptides correspond to the at least one antigen compound .

88. The engineered cell of claim 87, wherein each polypeptide comprises at least eight amino acids.

89. The engineered cell of claim 87, wherein the at least one antigen compound is stably expressed in the cell.

90. The engineered cell of claim 81, wherein the at least one antigen compound is transiently expressed in the cell.

91. The engineered cell of any of claims 81 to 90, wherein the at least one antigen compound that has been electroporated into the cell is a polypeptide comprising at least eight or nine amino acids.

92. The engineered cell of claim 91, wherein the polypeptide is between 8 to 25 amino acids long.

93. The engineered cell of claim 93, wherein the polypeptide is 25 amino acids long.

94. The engineered cell of any of claims 32 to 36 or 81 to 93, wherein the engineered cell comprises a primary human B cell.

95. The engineered cell of claim 94, wherein the primary human B cell is derived from peripheral blood.

96. The engineered cell of claim 94, wherein the primary human B cell is derived from a human tissue that contain B cells

97. The engineered cell of claim 96, wherein the human tissues comprise tumor tissue, lymph nodes, spleen, cord blood, body fluids, and bone marrow.

98. The engineered cell of claim 94, wherein the primary human B cell is obtained by differentiation of a precursor cell.

99. The engineered cell of claim 98, wherein the precursor cell comprises hematopoietic stem cells.

100. The engineered cell of claim 94, wherein the primary human B cell is obtained by differentiation of induced pluripotent stem cells (iPSC).

101. A culturing mix comprising engineered cells according to any one of claims 81-100 and a culturing medium.

102. The method of claim 74, wherein the antigen compound is expressed from a polynucleotide that is integrated into the cell genome to achieve continuous expression.

103. The method of claim 74, 75, or 102, wherein expression is at an effective level.

~~104. The method of claim 74, 102, or 103, wherein the antigen is introduced once and that the cells can be expanded afterwards, and used multiple times to assess T cells without a need to deliver the antigen a second time.~~

~~105. The method of any one of the claims 55-80 or 102-104 involving BCL2-like 1, wherein BCL2-like 1 is BCL-xL.~~

~~106. The engineered cell of any one of the claims 22-36 or 81-100 involving BCL2-like 1, wherein BCL2-like 1 is BCL-xL.~~

~~107. The method or engineered cell of any of the above claims, wherein the antigen compound is a TCR antigen compound.~~