CLAIMS:

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 obtained by differentiation of a precursor cell, and/or differentiation of induced pluripotent stem cells (iPSCs).

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

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.

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

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

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

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

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.

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.

13. The engineered cell of claim 12, 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.

14. The engineered cell of claim 13, further comprising expressing CD40L gene in the cell.

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

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

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

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.

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

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.