CLAIMS

What is claimed is:

1. A kit for expressing an exogenous sequence in T cells comprising at least a first and second co-stimulatory agents, wherein the co-stimulatory agents are provided on one or more beads; and an adenoviral vector comprising (i) said exogenous sequence and (ii) a sequence encoding at least one zinc finger nuclease.

~~2. The kit according to claim 1, wherein the co-stimulatory agents are provided on one or more beads.~~

~~3.~~2.The kit according to ~~any one of~~ claims 1 ~~to 2~~, wherein the T cell is a CD4+ cell.

~~4.~~3.The kit according to ~~any one of~~ claims 1 ~~to 2~~, wherein the T cell is a CD8+ cell.

~~5.~~4.The kit according to any one of the preceding claims, wherein at least one of the co-stimulatory agents comprises an anti-CD3 antibody.

~~6.~~5.The kit according to claim ~~5~~4, wherein the second co-stimulatory agent comprises an antiCD28 antibody.

~~7.~~6.The kit according to claim ~~5~~4, wherein the second co-stimulatory agent comprises IL-15.

~~8.~~7.The kit according to claim ~~5~~4, wherein the second co-stimulatory agent comprises a feeder cell.

~~9.~~8.The kit according to any of claims 1 to ~~8~~7, wherein the adenoviral vector is pseudotyped.

~~10.~~9. The kit according to claim ~~9~~8, wherein the pseudotyped adenovirus expression vector comprises (i) sequences from Ad5 and Ad35 adenoviruses.

~~11.~~10. The kit according to claim ~~10~~9, wherein the Ad35 sequence is F35.

~~12.~~11. The kit according to any one of the preceding claims, wherein the adenoviral vector comprises (ii) a sequence encoding at least one zinc finger nuclease.

~~13.~~12. A pharmaceutical composition comprising at least first and second co-stimulatory agents, wherein the co-stimulatory agents are provided on one or more beads; and an adenovirus vector comprising (i) said ~~an~~ exogenous sequence and (ii) a sequence encoding at least one zinc finger nuclease.

~~14.~~13. A pharmaceutical composition comprising:

T-cells obtained by activation and transduction of T cells with a pharmaceutical composition according to claim ~~13~~ 12 and

a pharmaceutically acceptable carrier.