The claims defining the invention are as follows:

1. A therapeutic composition for use in the treatment of a disease or condition characterized by aberrant expression of a gene, the composition comprising:

(a) a first nucleoprotein complex comprising a Cas12a protein and a first CRISPR guide molecule having a targeting region capable of binding a first target nucleic acid sequence; and an activating region capable of forming a nucleoprotein complex with the Cas12a protein, and the Cas12a protein is capable of cleaving the first target nucleic acid wherein said first CRISPR guide molecule comprises at least one deoxyribonucleotide; and

(b) a donor polynucleotide comprising a coding sequence of the gene target aberrantly expressed in individuals suffering from the disease or condition;

wherein the first nucleoprotein complex and the donor polynucleotide are present in a lipid nanoparticle, and wherein the gene target is selected from Table 3.

2. The use of claim 1, wherein in the CRISPR guide molecule, the activating region, the targeting region, or both comprise at least one deoxyribonucleotide.

3. The use of claim 1, wherein the lipid nanoparticle comprises one or more cationic lipids with pK_a of the lipid or combination of two or more lipids is between 6.1 and 6.7.

4. The use of claim 1, wherein the lipid nanoparticle comprises a neutral lipid.

5. The use of claim 1, wherein the lipid nanoparticle comprises a sterol.

6. The use of claim 1, wherein the lipid nanoparticle comprises one or more lipids selected from the group consisting of DSPC, DPPC, POPC, DOPE, SM, PEG-DMA, PEG-DMG, DOTMA, DOSPA, DOTAP, DMRIE, DC-cholesterol, DOTAP-cholesterol, GAP-DMORIE-DPyPE, GL67A-DOPE-DMPE-PEG, 98N12-5, C12-200, DLin-KC2-DMA (KC2), DLin-MC3-DMA (MC3), XTC, MD1, 7C1, PEG-CerC14, and PEG-CerC20.

7. The use of claim 1, further comprising a pharmaceutically acceptable carrier.

8. A method of making a transgenic animal for xenotransplantation, the method comprising:

(1) introducing into a cell of an animal:

a first nucleoprotein complex comprising a Cas12a protein and a first CRISPR guide molecule having a targeting region capable of binding a first target nucleic acid sequence; and an activating region capable of forming a nucleoprotein complex with the Cas12a protein, and the Cas12a protein is capable of cleaving the first target nucleic acid wherein said first CRISPR guide molecule comprises at least one deoxyribonucleotide;

wherein cleavage by the Cas12a protein results in a modification of a gene target selected from Table 6;

(2) introducing the cell into a foster female animal.

9. The method of claim 8, wherein the cell of an animal is an oocyte, ovum, or zygote.

10. The method of claim 8, wherein the cell of an animal is a somatic cell and the method further comprises after step (1), transferring the nucleus of the cell into an enucleated ovum or zygote.

11. The method of claim 8, wherein the animal is a pig.

12. The method of claim 8, wherein in the CRISPR guide molecule, the activating region, the targeting region, or both comprise at least one deoxyribonucleotide.

13. The method of claim 8, further comprising introducing into the cell a donor polynucleotide comprising a coding sequence of the gene target selected from A20, HO-1, FAT-1, TNF-alpha receptor, CD39, hirudin, TFPI, EPCR, TBM, CD46, DAF (CD55), CD59, CR1, CTLA4, CD47, one or more of Class I HLA.

14. The method of claim 13, wherein the cleavage with the Cas12a protein results in an insertion of the coding sequence into the genome of the cell and an increased expression of the gene in the cell.

15. The method of claim 8, wherein the cleavage with the Cas12a protein results in a disruption in the genome of the cell of a coding sequence of a gene target selected from GGTA1, b4GalNT2, CMAH, GT (alpha(1,3)-galactosyltransferase), GHR, one or more of Class I SLA.

16. A composition for making a transgenic animal for xenotransplantation, comprising an animal cell comprising:

a first nucleoprotein complex comprising a Cas12a protein and a first CRISPR guide molecule having a targeting region capable of binding a first target nucleic acid sequence; and an activating region capable of forming a nucleoprotein complex with the Cas12a protein, and the Cas12a protein is capable of cleaving the first target nucleic acid wherein said first CRISPR guide molecule comprises at least one deoxyribonucleotide;

wherein cleavage by the Cas12a protein results in a modification of a gene target selected from Table 6.

17. The composition of claim 16, wherein in the CRISPR guide molecule, the activating region, the targeting region, or both comprise at least one deoxyribonucleotide.

18. The composition of claim 16, further comprising a donor polynucleotide comprising a coding sequence of the gene target selected from A20, HO-1, FAT-1, TNF-alpha receptor, CD39, hirudin, TFPI, EPCR, TBM, CD46, DAF (CD55), CD59, CR1, CTLA4, CD47, one or more of Class I HLA.