Claims

1. Use of a first composition comprising an immunologically effective amount of a MVA vector comprising a first polynucleotide encoding at least one antigenic protein or an immunogenic polypeptide thereof; and a second composition comprising an immunologically effective amount of an adenovirus vector comprising a second polynucleotide encoding the at least one antigenic protein or an immunogenic polypeptide thereof; each in the manufacture of a medicament which when used in combination, is for the treatment of a disease in a human subject, wherein the medicament based upon the first composition is to be administered to the human subject for priming the immune response, and the medicament based upon the second composition is to be administered to the human subject one or more times for boosting the immune response, wherein:

a) the administration of both the first and second compositions is for enhancing the immune response in the human subject;
b) the disease is caused by a pathogen, a tumor or a filovirus; and
c) the at least one antigenic protein is derived from a pathogen, a tumor, or a filovirus..

2. The use of claim 1, wherein the at least one antigenic protein comprises the amino acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, and SEQ ID NO: 5.

3. The use of claim 1 or claim 2, wherein the MVA vector comprises a poly-nucleotide encoding four antigenic proteins, the four antigenic proteins comprising the amino acid sequences of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 4, and SEQ ID NO: 5, respectively.

4. The use of any one of the preceding claims wherein the adenovirus vector comprises a polynucleotide encoding at least one antigenic protein having the amino acid sequence of SEQ ID NO: 1, SEQ ID NO: 2, or SEQ ID NO: 3.

5. The use of any one of the preceding claims, wherein the adenovirus vector comprises a polynucleotide encoding the antigenic protein having the amino acid sequence of SEQ ID NO: 1.

6. The use of any one of the preceding claims, wherein the adenovirus vector is an rAd26 vector.

7. The first and second compositions according to any one of the preceding claims, for use in enhancing an immune response against an antigenic protein in a subject.

8. The first and second compositions according to any one of claims 1-6, for use in enhancing a CD4+ T cell response against an antigenic protein in a human subject.

9. The first and second compositions according to any one of claims 1-6, for use in enhancing a CD8+ T cell response against an antigenic protein in a human subject.

10. The first and second compositions according to any one of claims 1-8 for use as a medicament.

11. The use of any one of claims 1-6, wherein the second composition is to be administered 1-12 weeks or 2-12 weeks after the first composition.