Claims

1. A method of treatment or prophylaxis of RSV infections comprising the steps:

a) providing a mRNA sequence comprising a coding region, encoding at least one antigenic peptide or protein derived from the fusion protein F, the glycoprotein G, the short hydrophobic protein SH, the matrix protein M, the nucleoprotein N, the large polymerase L, the M2-1 protein, the M2-2 protein, the phosphoprotein P, the non-structural protein NS1 or the non-structural protein NS2 of Respiratory syncytial virus (RSV), or a fragment, variant or derivative thereof;
wherein the G/C content of the coding region is increased compared with the G/C content of the coding region of the wild type mRNA, and wherein the coded amino acid sequence of said GC-enriched mRNA is preferably not being modified compared with the coded amino acid sequence of the wild type mRNA, the composition comprising a plurality of the above mRNA sequences, a pharmaceutical composition comprising an mRNA sequence as defined above or a composition comprising a plurality of the above mRNA sequence and optionally a pharmaceutically acceptable carrier, or a kit or kit of parts comprising the components of the above mRNA sequence, the composition as previously defined, the pharmaceutical composition as defined above and optionally technical instructions with information on the administration and dosage of the components;

b) applying or administering the mRNA sequence, the composition, the pharmaceutical composition or the kit or kit of parts to a tissue or an organism; and

c) optionally administering RSV immune globuline.