Claims

1. Use of a mRNA or a therapeutic composition thereof in the manufacture of a medicament for the treatment of lower urinary tract symptoms (LUTS).

2. The use of claim 1, wherein the mRNA comprises a nucleic acid sequence encoding a growth factor.

3. The use of claim 1, wherein the mRNA comprises a nucleic acid sequence encoding insulin-like growth factor 1 (IGF1).

4. The use of claim 1, wherein the mRNA comprises a nucleic acid sequence encoding a signal peptide, optionally a nucleic acid sequence encoding the propeptide of IGF1 and a nucleic acid sequence encoding the mature IGF1.

5. The use of claim 4, wherein the nucleic acid sequence encoding the signal peptide encodes the signal peptide of the brain-derived neurotrophic factor (BDNF).

6. The use of claim 1, wherein the mRNA comprises a nucleic acid sequence encoding the signal peptide of the brain-derived neurotrophic factor (BDNF), a nucleic acid sequence encoding the propeptide of human IGF1, a nucleic acid sequence encoding the mature human IGF1 and does not comprise a nucleic acid sequence encoding an E-peptide of human IGF1.

7. The use of claim 1, wherein the mRNA comprises a nucleic acid sequence as shown in SEQ ID NO: 8.

8. The use of any one of claims 1 to 7, wherein the lower urinary tract symptoms (LUTS) are selected from the group consisting of stress urinary incontinence (SUI), mixed urinary incontinence, urge urinary incontinence, under active bladder, overflow incontinence and pelvic organ prolapse.

9. The use of any one of claims 1 to 7, wherein the lower urinary tract symptoms (LUTS) are selected from the group consisting of stress urinary incontinence (SUI), mixed urinary incontinence and urge urinary incontinence.

10. The use of any one of claims 1 to 7, wherein the lower urinary tract symptoms (LUTS) is stress urinary incontinence (SUI).

11. The use of any one of claims 1 to 10, wherein the mRNA is to be administered to the urethral sphincter muscle of a subject.

12. The use of any one of claims 1 to 10, wherein the mRNA is to be administered to the urethral sphincter muscle of a subject by intramuscular injection.

13. The use of claim 11 or 12, wherein the therapeutic effect of the mRNA to be administered in a rodent lasts for nine days or more after the to be administration of the mRNA.

14. The use of claim 11 or 12, wherein the concentration of the mRNA in the urethral sphincter muscle is by a factor of ten lower three days after the to be administration in a rodent than the concentration of the mRNA in the urethral sphincter muscle when to be administered, wherein the therapeutic effect of the mRNA lasts for nine days or more.

15. The mRNA or the therapeutic composition thereof for use of claim 13 or 14, wherein the therapeutic effect is assessed by measuring the urinary bladder leak point pressure, wherein a ratio of the urinary bladder leak point pressure measured four and nine days after the to be administration of the mRNA and of the urinary bladder leak point pressure measured when the mRNA is to be administered of at least 1.1 indicates a therapeutic effect.

16. A mRNA or a therapeutic composition thereof for use in the treatment of lower urinary tract symptoms (LUTS).