CLAIMS

1. A *Clostridium botulinum* toxin Type A complex comprising a HA70 component, a HA17 component, a HA33 component, a NTNH component and a BoNT/A1 component, wherein

(1) the HA70 component comprises the amino acid sequence of SEQ ID NO. 1 with retaining the function of the HA70 component;

(2) the HA17 component comprises the amino acid sequence of SEQ ID NO. 2 with retaining the function of the HA17 component;

(3) the HA33 component comprises

the amino acid sequence of SEQ ID NO. 3 with retaining the function of the HA33 component;

(4) the NTNH component comprises

the amino acid sequence of SEQ ID NO. 4 with retaining the function of the NTNH component;

(5) wherein the BoNT/A1 component comprises

the amino acid sequence of SEQ ID NO. 5 with retaining the function of the BoNT/A1 component; and

wherein the *Clostridium botulinum* toxin Type A complex has a molecular weight of 740-790 kDa.

2. The *Clostridium botulinum* toxin Type A complex of claim 1, wherein a therapeutically effective dose (ED_{50}) of the complex comprises 0.1-0.5 U in a mouse/animal experiment.

3. The *Clostridium botulinum* toxin Type A complex of claim 1, wherein a lethal dose (LD_{50}) of the complex comprises 1-5 U in a mouse/animal experiment.

4. The *Clostridium botulinum* toxin Type A complex of claim 1, wherein a margin of safety (MOS) of the complex comprises 2-50 in a mouse/animal experiment.

5. A nucleic acid encoding the *Clostridium botulinum* toxin Type A of

claim 1.

6. A pharmaceutical composition comprising the *Clostridium botulinum* toxin Type A complex of claim 1 and a pharmaceutically or dermatologically acceptable carrier.

7. A liquid formulation comprising the *Clostridium botulinum* toxin Type A complex of claim 1.

8. The liquid formulation of claim 7, comprising human serum albumin, methionine, arginine, sodium chloride, Tween 80, citrate buffer, and/or phosphate buffer.

9. The *Clostridium botulinum* toxin Type A complex of claim 1, the pharmaceutical composition of claim 6, or the liquid formulation of claim 7 or 8, for use in treating or preventing a disease.

10. An aesthetic method comprising administering an effective amount of the *Clostridium botulinum* toxin Type A complex of claim 1, or the liquid formulation of claim 7 or 8 to a subject in need thereof.

11. The aesthetic method of claim 10, comprising reducing the appearance of fine lines and/or wrinkles, enlarging eyes, lifting the corners of mouth, smoothing lines that appear on the upper lip, or relieving muscle tone.

12. Use of the *Clostridium botulinum* toxin Type A complex of claim 1, the pharmaceutical composition of claim 6 or the liquid formulation of claim 7 or 8 in the preparation of a medicament for treating or preventing a disease caused by synaptic transmission or release of acetylcholine,

wherein the disease is selected from the group consisting of neuromuscular disorders characterized by skeletal muscle hyperactivity, neuropathic pain, migraine, overactive bladder, rhinitis, sinusitis, acne, dystonia, dystonic contraction, hyperhidrosis, hypersecretion of one or more glands controlled by the cholinergic nervous system, hemifacial spasm, adult-onset spastic torticollis, anal fissure, blepharospasm, cerebral palsy, cervical dystonia, strabismus, temporomandibular joint disorders

and various types of muscle convulsions and spasms.

13. The *Clostridium botulinum* toxin Type A complex of claim 1, or the liquid formulation of claim 7 or 8, for use in reducing the appearance of fine lines and/or wrinkles, enlarging eyes, lifting the corners of mouth, smoothing lines that appear on the upper lip, or relieving muscle tone.

14. The pharmaceutical composition of claim 6, wherein the composition is in a lyophilized form.

15. The aesthetic method of claim 11, wherein the appearance of fine lines and/or wrinkles is on the face.

16. The use of claim 13, wherein the appearance of fine lines and/or wrinkles is on the face.