**Description**

**A COMPOSITION FOR THE TREATMENT OF TURNER SYNDROME**

**Technical Field**

The invention relates to a composition formed for the treatment of Turner syndrome.

**State of the Art**

Turner syndrome is the collective name for various symptoms resulting from the absence of one of the sex chromosomes in a female. The people with Turner syndrome appear female in phenotype, but the sex organs and gametes do not develop. They are infertile individuals. Congenital kidney disorders, heart anomalies, cystic hygroma are the most frequently observed diseases in the individuals with Turner syndrome.

According to the state of the art, the invention no. EP1503775B1 with classification “A61K 36/54” entitled “Formulations useful in the treatment of male and female impotence” discloses the pharmaceutical compositions containing: extracts of Tribulus terrestris, Turnera diffusa and Cinnamon cassia in the weight ratio of 1.5-3.5:1-2:0.1-0.4 respectively; Ginkgo biloba extract, and optionally arginine or a physiologically equivalent esters salt or precursor thereof. The compositions according to the invention are useful in the treatment of male and female sexual dysfunctions.

As a result, the presence of the need for a composition for treating Turner syndrome and the inadequacy of the existing solutions have made it necessary to perform an improvement in the relevant art.

**Object of the Invention**

In order to eliminate the disadvantages of the state of the art, an object of the invention is to trigger the release of LH and FSH.

Another object of the invention is to increase the igf-1 expression.

Another object of the invention is to increase the fgf-2 receptor sensitivity and the nerve growth factor sensitivity.

Another object of the invention is to support the T3 hormone production and increase the aromatase interaction of androstenedione and 4-androstenedione.

In order to achieve the aforesaid advantages, the invention is a composition for the treatment of Turner syndrome, said composition being obtained by the components selected from the group comprising (*R*)-3-acetyloxy-4-diethylammonio-arginate, 6-beta-(16,20)-stigmast-6-ene-phenyl-4-one, 7-alpha-(17,20)-stigmast-6-ene-phenyl-4-one that are used individually or in combinations.

The structural and characteristic features and all the advantages of the invention will become more clearly understood from the detailed description provided below and therefore, the evaluation must be made taking this detailed description into consideration.

**Detailed Description of the Invention**

The invention is a composition for the treatment of Turner syndrome. Said composition triggers the release of LH and FSH, increases the igf-1 expression, increases the fgf-2 receptor sensitivity and the nerve growth factor sensitivity, supports the T3 hormone production and increases the aromatase interaction of androstenedione and 4-androstenedione.

The composition according to the invention contains (*R*)-3-acetyloxy-4-diethylammonio-arginate, 6-beta-(16,20)-stigmast-6-ene-phenyl-4-one, 7-alpha-(17,20)-stigmast-6-ene-phenyl-4-one.

Said composition is obtained by a mixture of the aforesaid components according to the following ratios by weight:

22-48% (*R*)-3-acetyloxy-4-diethylammonio-arginate,

34-32% 6-beta-(16,20)-stigmast-6-ene-phenyl-4-one,

44-20% 7-alpha-(17,20)-stigmast-6-ene-phenyl-4-one

The composition is obtained from the aforesaid components selected from the aforesaid group and used according to the mentioned weight ratio ranges individually or in combinations.

Said invention also encompasses the use of said composition for treating Turner syndrome and the manufacture thereof for this purpose.

**CLAIMS**

1. A composition for the treatment of Turner syndrome, said composition being obtained by the components selected from the group comprising (*R*)-3-acetyloxy-4-diethylammonio-arginate, 6-beta-(16,20)-stigmast-6-ene-phenyl-4-one, 7-alpha-(17,20)-stigmast-6-ene-phenyl-4-one that are used individually or in combinations.
2. A composition according to Claim 1 characterized in that it comprises 22-48% by weight (*R*)-3-acetyloxy-4-diethylammonio-arginate.
3. A composition according to Claim 1 characterized in that it comprises 34-32% by weight 6-beta-(16,20)-stigmast-6-ene-phenyl-4-one.
4. A composition according to Claim 1 characterized in that it comprises 44-20% by weight 7-alpha-(17,20)-stigmast-6-ene-phenyl-4-one.
5. Use of the components according to Claims 1 to 4 obtained individually or in combinations from the group consisting of (*R*)-3-acetyloxy-4-diethylammonio-arginate, 6-beta-(16,20)-stigmast-6-ene-phenyl-4-one, 7-alpha-(17,20)-stigmast-6-ene-phenyl-4-one **for the manufacture of a composition for treating Turner syndrome**.

**ABSTRACT**

**A COMPOSITION FOR THE TREATMENT OF TURNER SYNDROME**

The invention relates to a composition formed for the treatment of Turner syndrome.

No figure.