



US 20080020972A1

(19) **United States**

(12) **Patent Application Publication**  
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(10) **Pub. No.: US 2008/0020972 A1**

(43) **Pub. Date: Jan. 24, 2008**

(54) **USE OF HUMAN CHORIONIC  
GONADOTROPIN ORALLY FOR THE  
TREATMENT OF OVERWEIGHT (OBESITY)  
ASSOCIATED WITH HIGH BLOOD  
TENSION, NON-INSULIN-DEPENDENT  
DIABETES, HYPERCHOLESTEROLEMIA,  
DYSLIPIDEMIAS AND LIPODYSTROPHY**

**Publication Classification**

(51) **Int. Cl.**  
*A61K 38/24* (2006.01)  
*A61P 3/00* (2006.01)  
(52) **U.S. Cl.** ..... **514/8**

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(57) **ABSTRACT**

Human Chorionic Gonadotropin administered by intramuscular route is traditionally used for the treatment of sterility and cryptorchidism. After numerous tests performed, a compound to be administered orally—sublingual—has been developed with such drug to treat patients suffering from overweight associated with high blood tension, non-insulin-dependant diabetes, hypercholesterolemia, dyslipidemias and lipodystrophy. The compound is to be used for controlled treatment of overweight associated with high blood tension, non-insulin-dependant diabetes, hypercholesterolemia, dyslipidemias and lipodystrophy. In the current technique, Human Chorionic Gonadotropin is administered by intramuscular route to treat sterility and cryptorchidism disorders.

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(21) **Appl. No.: 11/826,214**

(22) **Filed: Jul. 13, 2007**

(30) **Foreign Application Priority Data**

Jul. 21, 2006 (AR) ..... 20060103147

**USE OF HUMAN CHORIONIC GONADOTROPIN ORALLY FOR THE TREATMENT OF OVERWEIGHT (OBESITY) ASSOCIATED WITH HIGH BLOOD TENSION, NON-INSULIN-DEPENDENT DIABETES, HYPERCHOLESTEROLEMIA, DYSLIPIDEMIAS AND LIPODYSTROPHY**

[0001] This invention relates to “THE USE OF HUMAN CHORIONIC GONADOTROPIN ORALLY FOR THE TREATMENT OF OVERWEIGHT (OBESITY) ASSOCIATED WITH HIGH BLOOD TENSION, NON-INSULIN-DEPENDANT DIABETES, HYPERCHOLESTEROLEMIA, DYSLIPIDEMIAS AND LIPODYSTROPHY.”

**ABSTRACT**

[0002] Human Chorionic Gonadotropin administered by intramuscular route is traditionally used for the treatment of sterility and cryptorchidism. After numerous tests performed, a compound to be administered orally—sublingual—has been developed with such drug to treat patients suffering from overweight associated with high blood tension, non-insulin-dependant diabetes, hypercholesterolemia, dyslipidemias and lipodystrophy.

**SCOPE**

[0003] The compound is to be used for controlled treatment of overweight associated with high blood tension, non-insulin-dependant diabetes, hypercholesterolemia, dyslipidemias and lipodystrophy.

**CURRENT TECHNIQUE**

[0004] In the current technique, Human Chorionic Gonadotropin is administered by intramuscular route to treat sterility and cryptorchidism disorders.

**PROBLEM TO BE SOLVED**

[0005] When obese persons are healthy, overweight treatment is easier to administer through diets to be followed without difficulties by patients. However, where overweight is associated with health problems like high blood tension, diabetes, hypercholesterolemia, dyslipidemias and lipodystrophy, treatments are difficult and administration of additional drugs as coadyuvant therapy is necessary.

**THIS INVENTION CAN SOLVE THE PROBLEM**

[0006] After several essays testing, selecting and discarding drugs, Human Chorionic Gonadotropin was determined to act satisfactorily to solve the problem. On one hand, this drug acts inhibiting fat cell (adipocytes) lipogenesis, and on the other, Beta endorphin in gonadotropin molecule has action on the hypothalamus, thus allowing an improvement in patient’s clinical condition during treatment, with rapid improvement on glycemia, lipid, cholesterol and blood tension levels. Finally, the most suitable administration form, and the one which showed the best results as well, was determined to be sublingual form.

**ADVANTAGES**

[0007] An advantage of this invention is the successful treatment of obesity in patients with high blood tension, non-insulin-dependant diabetes, hypercholesterolemia, dyslipidemias and lipodystrophy.

[0008] The advantages of this invention, which should not be limited to the description above, will become more apparent and the invention itself better understood by reference to the following example of a preferred embodiment.

**DESCRIPTION OF EMBODIMENT**

[0009] “THE USE OF HUMAN CHORIONIC GONADOTROPIN ORALLY FOR THE TREATMENT OF OVERWEIGHT (OBESITY) ASSOCIATED WITH HIGH BLOOD TENSION, NON-INSULIN-DEPENDANT DIABETES, HYPERCHOLESTEROLEMIA, DYSLIPIDEMIAS AND LIPODYSTROPHY” is represented by the following formulation:

[0010] Powder Human Chorionic Gonadotropin dissolved in physiological saline and administered placing it under the tongue.

[0011] A preferred drug formulation consists of 500 international units of powder Human Chorionic Gonadotropin per milliliter solution.

**ACTION**

[0012] As stated elsewhere, the drug action inhibits fat cell (adipocytes) lipogenesis, and on the other hand, Beta endorphin in gonadotropin molecule has action on the hypothalamus, thus allowing an improvement in patient’s clinical condition during treatment, with rapid improvement on glycemia, lipid, cholesterol and blood tension levels.

[0013] The advantages of this invention are plain from the description above, representing a beneficial technological improvement that warrants the inclusion of the invention in the law with the pertinent legal protection as per the appended claims.

1) “THE USE OF HUMAN CHORIONIC GONADOTROPIN ORALLY FOR THE TREATMENT OF OVERWEIGHT (OBESITY) ASSOCIATED WITH HIGH BLOOD TENSION, NON-INSULIN-DEPENDANT DIABETES, HYPERCHOLESTEROLEMIA, DYSLIPIDEMIAS AND LIPODYSTROPHY” to be administered as a sublingual form, characterized by comprising a solution of powder human chorionic gonadotropin dissolved in physiological saline.

2) “THE USE OF HUMAN CHORIONIC GONADOTROPIN ORALLY FOR THE TREATMENT OF OVERWEIGHT (OBESITY) ASSOCIATED WITH HIGH BLOOD TENSION, NON-INSULIN-DEPENDANT DIABETES, HYPERCHOLESTEROLEMIA, DYSLIPIDEMIAS AND LIPODYSTROPHY” of claim 1), characterized by the solution containing 500 international units of powder Human Chorionic Gonadotropin per milliliter solution.

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