**Description**

**A COMPOSITION FOR ACCELERATING THE WOUND HEALING IN DIABETIC PATIENTS**

**Technical Field**

The invention relates to a composition formed for accelerating the wound healing in diabetic patients.

**State of the Art**

Diabetes is a disease that develops and lasts a lifetime in case the glandular organ called pancreas in the human body does not produce the insulin hormone in sufficient amount or the insulin hormone it produces is not able to be used efficiently. As a result, the individual becomes unable to utilize the sugar, i.e. glucose, passing from the food intake to the blood and the blood glucose increases (hyperglycemia).

Diabetes itself and the treatment methods for diabetes may lead to many complications. If the disease is not properly controlled, acute complications such as hyperglycemia, ketoacidosis or nonketotic hyperosmolar coma may develop. The primary chronic complications of the disease include the circulatory system (cardiovascular) diseases (hypertension, heart failure and atherosclerosis), chronic renal failure (nephropathy), retina damage likely to cause blindness (retinopathy), various types of nerve damage (peripheral neuropathy) and microvascular disorders delaying the wound healing and causing impotence. The delayed wound healing that emerges as a result of the circulatory disorders particularly in the feet may result in amputation.

As a result, the presence of the need for a composition for accelerating the wound healing in the diabetic patients 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 accelerate the wound healing in the diabetic patients.

Another object of the invention is to provide GLUT4 activation.

Another object of the invention is to activate SRC and Erk tyrosine kinases.

Another object of the invention is to trigger the production of epidermal growth factor and vascular endothelial growth factor (VEGF) in the open wound.

Another object of the invention is to trigger AMPK production.

In order to achieve the aforesaid advantages, the invention is a composition for accelerating the wound healing in the diabetic patients, said composition being obtained by the components selected from the group comprising xanthoangelol and 4-hydroxyderricin 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 accelerating the wound healing in diabetic patients. The composition according to the invention contains xanthoangelol and 4-hydroxyderricin.

4-hydroxyderricin and xanthoangelol, the ingredients of the composition according to the invention, provide GLUT4 activation. These two ingredients also activate SRC and Erk tyrosine kinases. They trigger the production of epidermal growth factor and vascular endothelial growth factor (VEGF) in the open wound. Said ingredients also trigger AMPK production.

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

40-60% xanthoangelol,

60-40% 4-hydroxyderricin.

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 accelerating the wound healing in diabetic patients and the manufacture thereof for this purpose.

**CLAIMS**

1. A composition for accelerating the wound healing in the diabetic patients, said composition being obtained by the components selected from the group comprising xanthoangelol and 4-hydroxyderricin that are used individually or in combinations.
2. A composition according to Claim 1 characterized in that it comprises 40-60% by weight xanthoangelol.
3. A composition according to Claim 1 characterized in that it comprises 60-40% by weight 4-hydroxyderricin.
4. Use of the components according to Claims 1 to 3 obtained individually or in combinations from the group consisting of xanthoangelol and 4-hydroxyderricin for the manufacture of a composition for accelerating the wound healing in the diabetic patients.

**ABSTRACT**

**A COMPOSITION FOR ACCELERATING THE WOUND HEALING IN DIABETIC PATIENTS**

The invention relates to a composition formed for accelerating the wound healing in diabetic patients.

No figure.