**Description**

**A COMPOSITION PROMOTING HEPATIC AND INTESTINAL TISSUE RENEWAL**

**Technical Field**

The invention relates to a composition promoting hepatic and intestinal tissue renewal.

**State of the Art**

Hepatic Encephalopathy is the condition of damage in the brain and nervous system as a result of liver diseases. Hepatic encephalopathy is an emergency medical condition requiring hospitalization. The goal of the treatment is the emergency life support, therapy of the factors triggering the encephalopathy and the neutralization of ammonia and other toxins and the removal of the same from the body. Once coma develops, it may be necessary to provide respiratory and circulatory support for the patient. The triggering factors, especially the upper gastrointestinal system hemorrhages should be stopped. The treatment of infections, kidney failure and electrolyte abnormalities (particularly of potassium) is important. The cases with recurrent encephalopathy require the protein restriction. Lactulose and neomycin are used to prevent the intestinal bacteria from producing ammonia. Intestinal refers to the tissue of the intestines.

According to the state of the art, the invention no. WO 1999/019296 with classification “C07C 233/63” entitled “Aminobutanoic acid derivatives” concerns aminobutanoic acid derivatives represented by general formula (I) and salts thereof (wherein each symbol is as defined in the description). The derivatives inhibit matrix metalloproteinases and are therefore useful for the prevention and/or treatment of rheumatism, osteoarthritis, pathologic bone resorption, osteoporosis, periodontal diseases, interstitial nephritis, arteriosclerosis, pulmonary emphysema, hepatic cirrhosis, corneal injury, diseases due to metastasis and infiltration of cancer cells or proliferation thereof, autoimmune diseases (such as Crohn's disease and Sjögren's disease), diseases due to transmigration of white blood cells or infiltration thereof, neovascularization, multiple sclerosis, aortic aneurysm, endometritis and so on.

Further, the invention no. WO 2001/025210 entitled “Substituted 2-thio-3,5-dicyano-4-aryl-6-aminopyridines and the use thereof” relates to compounds of general formula (I), a method for the production thereof and the use thereof as pharmacologically effective substances for a broad medical indication spectrum. Furthermore, selective adenosine receptor ligands, preferably selective adenosine A1-, adenosine A2a- and/or adenosine A2b-receptor ligands are provided for the prophylaxis and/or the treatment of diseases, especially cardiovascular diseases, diseases of the urogenital region, diseases of the respiratory tract, inflammatory and neuroinflammatory diseases, diabetes, especially pancreatic diabetes, neurodegenerative diseases, pain states, cancer as well as liver fibrosis and liver cirrhosis.

Further, the invention no. EP1824563B1 entitled “Compositions comprising ornithine and phenylacetate or phenylbutyrate for treating hepatic encephalopathy” relates to use of ornithine in the manufacture of a medicament for use in combination with at least one of phenylacetate and phenylbutyrate for preventing or treating liver decompensation or hepatic encephalopathy. The invention also relates to use of at least one of phenylacetate and phenylbutyrate in the manufacture of a medicament for use in combination with ornithine for preventing or treating liver decompensation or hepatic encephalopathy.

Further, the invention no. EP1888074B1 entitled “Agent for the prevention and treatment of liver diseases containing pyrazolopyrimidine derivative” relates to the pharmaceutical composition for prevention and treatment of liver diseases containing pyrazolopyrimidine derivative as an active ingredient. According to the invention, pyrazolopyrimidine derivative has an excellent effect on inhibiting collagen synthesis in hepatic stellate cells and acts directly on the portal vein. Particularly, it may increase the diameter and the amount of blood flow of the portal vein, and finally decrease the pressure thereof. Therefore, pyrazolopyrimidine derivative can be used advantageously for prevention and treatment of hepatic fibrosis, liver cirrhosis caused by hepatic fibrosis, portal hypertension and various complications caused by portal hypertension. In addition, pyrazolopyrimidine derivative according to the invention can reduce dosing frequency because of its long half-life, and therefore, has an advantage to improve the drug compliance of patients suffering from chronic liver diseases.

As a result, the presence of the need for a composition for promoting hepatic and intestinal tissue renewal 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 increase the level of igf-1 and epithelial growth factor.

Another object of the invention is to increase the level of vascular epithelial growth factor.

Another object of the invention is to increase the expression of transforming growth factor type 1.

Another object of the invention is to increase the fibroblast growth factor receptor sensitivity.

In order to achieve the aforesaid advantages, the invention is a composition for promoting hepatic and intestinal tissue renewal, said composition being obtained by the components selected from the group comprising 16,20-bis(2-dimethyl)-6-O-stigmast-4-en-coumaroyl-3-one, 2,3-bis(6-oxoethyl)-4-0-dioscin, 3,5-methoxy-stigmast-6-en-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 promoting hepatic and intestinal tissue renewal. Said composition increases the level of igf-1 and epithelial growth factor, increases the level of vascular epithelial growth factor, increases the expression of transforming growth factor type 1 and increases the fibroblast growth factor receptor sensitivity.

The composition according to the invention contains 16,20-bis(2-dimethyl)-6-O-stigmast-4-en-coumaroyl-3-one, 2,3-bis(6-oxoethyl)-4-0-dioscin, 3,5-methoxy-stigmast-6-en-phenyl-4-one.

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

50-20% 16,20-bis(2-dimethyl)-6-O-stigmast-4-en-coumaroyl-3-one,

22-18% 2,3-bis(6-oxoethyl)-4-0-dioscin,

28-62% 3,5-methoxy-stigmast-6-en-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 promoting hepatic and intestinal tissue renewal and the manufacture thereof for this purpose.

**CLAIMS**

1. A composition for promoting hepatic and intestinal tissue renewal, said composition being obtained by the components selected from the group comprising 16,20-bis(2-dimethyl)-6-O-stigmast-4-en-coumaroyl-3-one, 2,3-bis(6-oxoethyl)-4-0-dioscin, 3,5-methoxy-stigmast-6-en-phenyl-4-one that are used individually or in combinations.
2. A composition according to Claim 1 characterized in that it comprises 50-20% by weight 16,20-bis(2-dimethyl)-6-O-stigmast-4-en-coumaroyl-3-one.
3. A composition according to Claim 1 characterized in that it comprises 22-18% by weight 2,3-bis(6-oxoethyl)-4-0-dioscin.
4. A composition according to Claim 1 characterized in that it comprises 28-62% by weight 3,5-methoxy-stigmast-6-en-phenyl-4-one.
5. Use of the components according to Claims 1 to 4 obtained individually or in combinations from the group consisting of 16,20-bis(2-dimethyl)-6-O-stigmast-4-en-coumaroyl-3-one, 2,3-bis(6-oxoethyl)-4-0-dioscin, 3,5-methoxy-stigmast-6-en-phenyl-4-one for the manufacture of a composition for promoting hepatic and intestinal tissue renewal.

**ABSTRACT**

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No figure.