Mitsubishi Corporation Life Sciences Limited

February 21, 2022
Mitsubishi Corporation Life Sciences Limited

Mitsubishi Corporation Life Sciences granted new US patent for "Composition containing glutathione as an active ingredient for improvement or prevention of Non-Alcoholic Fatty Liver"

Mitsubishi Corporation Life Sciences Limited (Head Office: Chiyoda-ku, Tokyo Japan; Hiroshi Fujiki, representative director and president) announces that the U.S. Patent and Trademark Office has granted a patent, US 11,207,371 B2[1], to Mitsubishi Corporation Life Sciences for a method of improving nonalcoholic fatty liver disease in patients in need of treatment, comprising the administration of a composition containing glutathione as its active ingredient.

L-Glutathione Reduced is a tripeptide that exists in every cell of the human body. Its function is complex and remains the subject of ongoing research, but in sum we know that it scavenges free radicals throughout the system, a process that is generally seen as countering cell oxidation; and that it activates liver function. It's long been taken to beautify skin, and help relieve muscle fatigue.

KOHJIN Life Sciences Co. Ltd., affiliate of Mitsubishi Corporation Life Sciences and manufacturer of L-Glutathione Reduced, launched their pioneering research on Glutathione nearly 50 years ago, first establishing its recognition in Japan as an active pharmaceutical ingredient (API).

1 Details of the claim

1. A method of improving nonalcoholic fatty liver disease in patients in need of treatment, comprising the administration of a composition containing glutathione as its active ingredient, wherein the nonalcoholic fatty liver disease is indicated by low liver stiffness corresponding to any one of the following:

   (1) measurement value of Type IV collagen 7S domain in the serum is 4.5 ng/ml or less, or
   (2) measurement value with a device in which the principle is transient elastography that measures the propagation velocity of pulse oscillatory wave in the tissue with elasticity (kPa) by an ultrasonic pictorial analysis method as a noninvasive examination is 9.0 kPa or less, and an alanine aminotransferase (ALT) value after the composition is administered improved by 20% or more as compared to an alanine aminotransferase (ALT) value before the composition is administered.

2. The method of claim 1, wherein the disease having low liver stiffness corresponds to the measurement value of Type IV collagen 75 domain in the serum is 4.5 ng/ml or less.

3. The method of claim 1, wherein deposition of fat on a liver was suppressed in a treated patient as compared to an untreated patient.

4. The method of claim 1, wherein the patient has a glycosylated hemoglobin of 6.5% or more, and the patient is not treated for diabetes.

5. The method of claim 1, wherein the composition is administered orally.

For inquires about this release, please contact:

Mitsubishi Corporation Life Sciences Limited
Tokyo Takarazuka Building 14F, 1-1-3 Yurakucho, Chiyoda-ku, Tokyo 100-0006 Japan
prgroup_mcls@mcls-ltd.com