[CLAIMS]

[Claim 1]

Use of a pharmaceutical composition in the manufacture of a medicament for treating or preventing a liver disease, the pharmaceutical composition comprising a triple agonistic long-acting conjugate or triple agonist in a pharmaceutically effective amount and a pharmaceutically acceptable excipient, and a farnesoid X receptor agonist

wherein the triple agonistic long-acting conjugate is a substance represented by Chemical Formula 1 below:

[Chemical Formula 1]

$Z–L_x–Fc$

wherein L_x is a linker including an ethyleneglycol repeating unit, and x is 0 or a natural number,

Fc is an immunoglobulin Fc region,

– represents covalent bonds between L_x and Z and between Fc and L_x, respectively,

Z or the triple agonist includes one amino acid sequence selected from the group consisting of SEQ ID NOS: 21-22, 42-43, 50, 64-77, and 95-102.

[Claim 2]

The use of claim 1, wherein the farnesoid X receptor agonist is selected from the group consisting of Cafestol, Chenodeoxycholic acid, Obeticholic acid, Fexaramine, GW 4064, PX104, 6-ethyl-chedeoxycholic acid (6E-CDCA), AKN-083, Tropifexor, Cilofexor, EDP-305 AGN-242266, AGN-242256, EP-024297, RDX-023, BWL-200, GNF-5120, GS-9674, LMB-763, Px-102, Px-103, M790, M780, M450, M-480, MET-409, MET-642, PX20606, EYP-001, TERN-101, TC-100, and INT-2228.

[Claim 3]

The use of claim 1, wherein a formula weight of the ethyleneglycol repeating unit in L_x is in a range of 1 kDa to 100 kDa.

[Claim 4]

The use of claim 1, wherein Z or the triple agonist includes one amino acid sequence selected from the group consisting of SEQ ID NOS: 21, 22, 42, 43, 50, 64, 66, 67, 70, 71, 76, 77, 96, 97, and 100.

[Claim 5]

The use of claim 4, wherein the peptide includes an amino acid sequence selected from the group consisting of SEQ ID NOS: 21, 22, 42, 43, 50, 66, 67, 77, 96, 97, and 100.

[Claim 6]

The use of claim 5, wherein the peptide includes an amino acid sequence selected from the group consisting of SEQ ID NOS: 21, 22, 42, 43, 50, 77, and 96.

[Claim 7]

The use of claim 1, wherein the peptide includes an amino acid sequence having SEQ ID NO: 42.

[Claim 8]

The use of claims 1 to 7, wherein the pharmaceutical composition is further combined with an acetyl-CoA carboxylase inhibitor.

[Claim 9]

The use of claim 8, wherein the acetyl-CoA carboxylase inhibitor is selected from the group consisting of CP-640186, (4-piperidinyl)-piperazine derivatives, 1,4-disubstituted cyclohexane derivatives, spirochromanone derivatives, spirolactam derivatives, spirodiamine derivatives, spiropentacylamide derivatives, pseudopeptide pyrrolidinedione derivatives, macrocyclic polyketone derivatives, firsocostat-containing thiophene pyrimidone derivatives, amino-oxazole derivatives, azobenzimidazole derivatives, and PF-05221304.

[Claim 10]

The use of any one of claims 1 to 7, wherein the liver disease is a non-alcoholic fatty liver disease or a cholestatic liver disease.

[Claim 11]

The use of claim 10, wherein the non-alcoholic fatty liver disease comprises at least one disease selected from the group consisting of simple steatosis, liver inflammation, non-alcoholic fatty liver, non-alcoholic steatohepatitis, liver cirrhosis, liver fibrosis, liver decompensation, and hepatocellular carcinomas.

[Claim 12]

The use of claim 10, wherein the cholestatic liver disease is selected from the group consisting of primary biliary cirrhosis, primary sclerosing cholangitis, and any combination thereof.

[Claim 13]

The pharmaceutical composition according to any one of claims 10 to 12, wherein the pharmaceutical composition is further combined with an acetyl-CoA carboxylase inhibitor.

[Claim 14]

The use of claim 10, wherein the non-alcoholic fatty liver disease comprises at least one selected from the group consisting of liver inflammation, non-alcoholic steatohepatitis, and liver fibrosis.