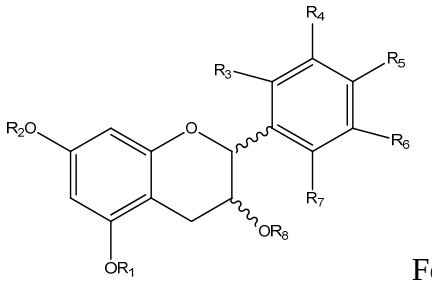
CLAIMS

1. Use of a polymeric composition in the manufacture of a medicament to treat one or more symptoms of a SHC-1/p66-related disease selected from the group consisting of aging, diabetes, and reperfusion injuries after ischemia,

wherein the polymeric composition comprises monomer units having formula I and/or a pharmaceutically acceptable salt or solvate thereof:



Formula I

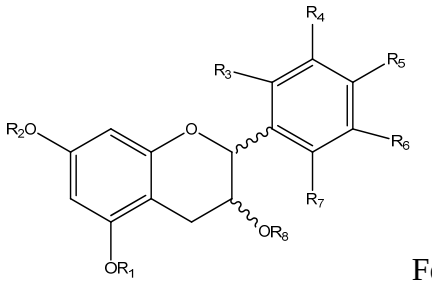
[in Formula I, each of R_1, R_2, R_3, $R_7$and R_8, independently, is H; R_4 is H or OH, R_5 is OH, R_6 is an acyl group], and

wherein the polymerized number of the monomer ranges from 2-30, and the average molecular weight of the polymer ranges from 600-10,000.

2. The use of claim 1, wherein the one or more symptoms of a SHC-1/p66- related disease are selected from the group consisting of cellular degeneration, hepatocyte swelling, mitochondrial dysfunction, age-related motor deficits, reduced stride length; high glucose associated endothelial dysfunction, atherogenesis, nephropathy, and cardiomyopathy.

3. Use of a polymeric composition in the manufacture of a medicament to inhibit hepatocyte swelling,

wherein the polymeric composition comprises monomer units having formula I and/or a pharmaceutically acceptable salt or solvate thereof:



Formula I

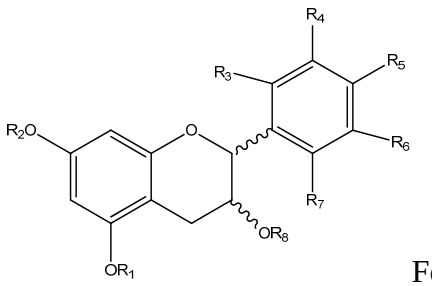
,

[in Formula I, each of R_1, R_2, R_3, $R_7$and R_8, independently, is H; R_4 is H or OH, R_5 is OH, R_6 is an acyl group], and

wherein the polymerized number of the monomer ranges from 2-30, and the average molecular weight of the polymer ranges from 600-10,000.

4. Use of a polymeric composition in the manufacture of a medicament to reduce the production of reactive oxygen species (ROS) ,

wherein the polymeric composition comprises monomer units having formula I and/or a pharmaceutically acceptable salt or solvate thereof:



Formula I

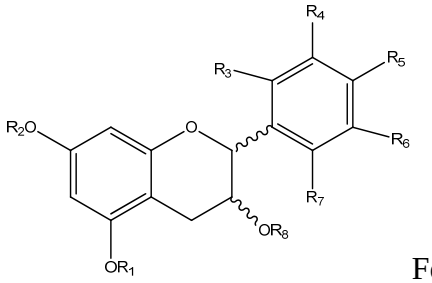
[in Formula I, each of R_1, R_2, R_3, $R_7$and R_8, independently, is H; R_4 is H or OH, R_5 is OH, R_6 is an acyl group], and

wherein the polymerized number of the monomer ranges from 2-30, and the average molecular weight of the polymer ranges from 600-10,000.

5. The use of any one of claims 1-4, wherein the method comprises administering the composition parenterally, orally, nasally, rectally, topically, or buccally.

6. The use of any one of claims 1-4, wherein the composition is administered at a dose from 50 to 1,500 mg/kg/day.

7. A composition comprising a polymeric composition comprising monomer units having formula I in the form of a nutrient, nutriceutical, health food, or supplement:



Formula I

[in Formula I, each of R_1, R_2, R_3, $R_7$and R_8, independently, is H; R_4 is H or OH, R_5 is OH, R_6 is an acyl group], and

wherein the polymerized number of the monomer ranges from 2-30, in the form of a nutrient, nutriceutical, health food, or supplement.