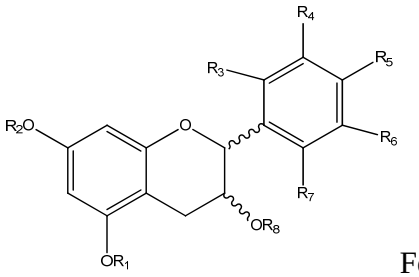
CLAIMS

1. Use of a polymeric composition for 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~~ing~~ monomer units having formula I and/or a pharmaceutically acceptable salt, solvate, or prodrug 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 H, OH or OCH~~each of R_1 and R_2, independently, is H, alkyl, or acyl; each of R_3, R_4, R_5, R_6, and R_7, independently, is H, OH, alkoxyl, or acyl; and R_8 is H or a saccharide moiety~~], and

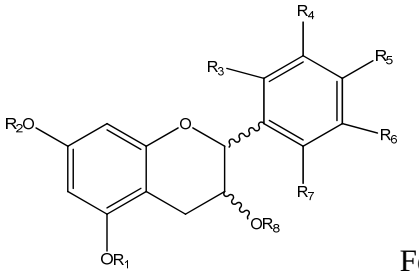
wherein the polymerized number of the monomer ranges from 2-30, and the average molecular weight of the polymer ranges from 600-10,000.

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. The use of claim 1 wherein the composition comprises BEL-X.~~

~~4.~~3. Use of a polymeric composition ~~in~~ for 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, solvate or prodrug thereof:



Formula I

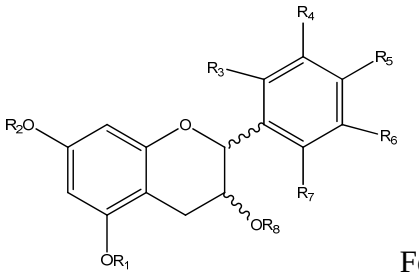
,

[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 H, OH or OCH~~each of R_1 and R_2, independently, is H, alkyl, or acyl; each of R_3, R_4, R_5, R_6, and R_7, independently, is H, OH, alkoxyl, or acyl; and R_8 is H or a saccharide moiety~~], 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.~~4. Use of a polymeric composition ~~in~~ for the manufacture of a medicament to reduce the production of reactive oxygen species (ROS) ,

wherein the polymeric composition comprises~~ing~~ monomer units having formula I and/or a pharmaceutically acceptable salt, solvate or prodrug 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 H, OH or OCH~~each of R_1 and R_2, independently, is H, alkyl, or acyl; each of R_3, R_4, R_5, R_6, and R_7, independently, is H, OH, alkoxyl, or acyl; and R_8 is H or a saccharide moiety~~], and

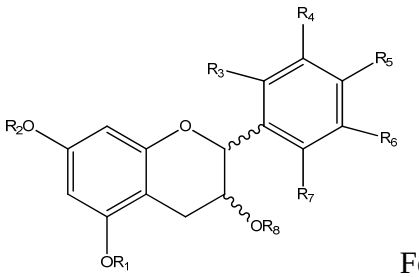
wherein the polymerized number of the monomer ranges from 2-30, and the average molecular weight of the polymer ranges from 600-10,000.

~~6.~~5. The use of any one of claims 1-~~4~~6, wherein the method comprises administering the composition parenterally, orally, nasally, rectally, topically, or buccally.

~~7.~~6. The use of any one of claims 1-~~4~~6, wherein the composition is administered at a dose from 50 to 1,500 mg/kg/day.

~~8.~~7. The use according to claim ~~6~~7, wherein the composition is in the form of a nutrient, nutriceutical, health food, or supplement.

~~8~~9. 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 H, OH or OCH~~each of R_1 and R_2, independently, is H, alkyl, or acyl; each of R_3, R_4, R_5, R_6, and R_7, independently, is H, OH, alkoxyl, or acyl; and R_8 is H or a saccharide moiety~~], and

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