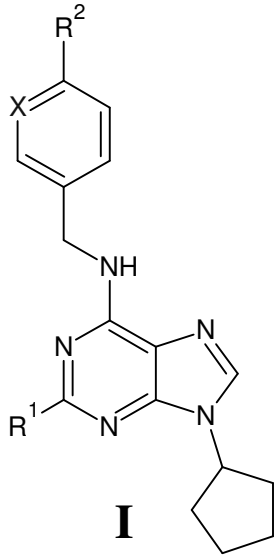
CLAIMS

1. 2-Substituted-6-biarylmethylamino-9-cyclopentyl-9*H*-purines of the general formula **I**



I

wherein

X is CH or N

R1 is selected from the group consisting of:

(4-aminocyclohexyl)amino,

(2-aminocyclohexyl)amino,

(3-aminocyclohexyl)amino,

(4-hydroxycyclohexyl)amino,

[(2*R*)-1-hydroxybutan-2-yl]amino,

(2-hydroxy-2-methylpropyl)amino,

(3-hydroxy-3-methylbutyl)amino,

[(3*S*)-2-hydroxy-2,4-dimethylpent-3-yl]amino,

~~piperazin-1-yl,~~

~~4-methylpiperazin-1-yl,~~

~~morpholin-4-yl,~~

[(1*S*)-1-(dimethylamino)-2-hydroxyethyl]amino,

[(3*R*)-2-hydroxypent-3-yl]amino,

(3-hydroxypropyl)amino,

(2-aminoethyl)amino,

(3-aminopropyl)amino,

(2-aminopropyl)amino,
~~4-(aminomethyl)piperidin-1-yl,~~
~~(piperidin-4-ylmethyl)amino,~~
~~4-[2-(2-hydroxyethoxy)ethyl]piperazin-1-yl,~~
~~4-(2-hydroxyethyl)piperazin-1-yl~~

and

R2 is selected from the group consisting of

substituted phenyl, wherein the substituents are in any positions and are independently selected from the group consisting of OH, OCH_3, NH_2, Cl, Br, F, I, COOH, NO_2,
2-pyridyl,
3-pyridyl,
4-pyridyl,
2-furanyl
3-furanyl,
thien-2-yl,
thien-3-yl,
pyrazol-1-yl,
pyrazol-3-yl,
pyrazol-4-yl,
pyrrol-1-yl,

and the pharmaceutically acceptable salts thereof, in particular salts with alkali metals, ammonium or amines, or addition salts with acids.

~~2. 2-Substituted-6-biarylmethylamino-9-cyclopentyl-9*H*-purines according to claim 1 of the general formula I in the form of (R) or (S) isomers in case of chirality in position R2.~~

~~3~~2. 2-Substituted-6-biarylmethylamino-9-cyclopentyl-9*H*-purine derivatives according to claim 1 ~~or 2~~ for use as medicaments.

~~4~~3. 2-Substituted-6-biarylmethylamino-9-cyclopentyl-9*H*-purine derivatives according to claim 1 ~~or 2~~ for use in inhibiting angiogenesis in mammalian cells.

~~5~~4. 2-Substituted-6-biarylmethylamino-9-cyclopentyl-9*H*-purine derivatives according to claim 1 ~~or 2~~ for use in suppression of inflammation.

~~6~~5. 2-Substituted-6-biarylmethylamino-9-cyclopentyl-9*H*-purine derivatives according to claim 1 ~~or 2~~ for use in the treatment of cancer disorders.

~~7~~6. 2-Substituted-6-biarylmethylamino-9-cyclopentyl-9*H*-purine derivatives according to claim 1 ~~or 2~~ for use in the treatment of cancer disorders selected from the group comprising hepatocellular carcinoma and metastatic hepatocellular carcinoma.

~~8~~7. A pharmaceutical composition, characterized in that it contains at least one 2-substituted-6-biarylmethylamino-9-cyclopentyl-9*H*-purine derivative according to claim 1 ~~or 2~~ and a pharmaceutically acceptable carrier.

~~9~~8. The pharmaceutical composition according to claim ~~11~~7, characterized in that it further contains at least one further anti-tumor agent, preferably cis-platinum, doxorubicin or sorafenib.