**Description**

**A FORMULATION DISPLAYING ANTI-MITOTIC EFFECT BY SUPPPRESSING CDK-1 CDK-2 AND CYCLINE B1 EXPRESSION**

**Field of Invention**

The present invention herewith discloses a formulation developed to display anti-mitotic effect by suppressing cdk-1 cdk-2 and cycline b1 expression.

**Background of the Related Technology**

At present it is known that an anti-mitotic agent is a medicament that can stop cell reproduction. It block mitosis at its various phases and therefore prevents cell division (reproduction). Some, on one hand, combine with certain protein compounds by acting as alkyl and change the structure of deoxyribonucleic acid (DNA) and some on the other hand act as anti-metabolites. Anti-mitotics that have an antibiotic structure are derived from Streptomyces cultures; those of plant origin from vinca alkaloids. Some have hormone structure, and certain ones are enzymes derived from bacteria. A majority of anti-mitotic drugs are used in cancer treatment.

In state of art technology, invention no "EP2229943B1 ", with title " Compounds for use in the treatment of peripheral neuropathy” and under classification number "A61K 31/357” discloses a benzodioxo compound of Formula (I) or a pharmaceutically acceptable salt of the compound thereof. The referred invention is related to a pharmaceutical composition which consists of at least the compound with formula (I) as described in any one of the Claims 1 to 3, as an active agent or a pharmaceutically acceptable salt of the compound thereof and at least one additional compound and/or at least one additional cytostatic or anti-mitotic compound and/or preferably a pharmaceutically acceptable carrier. The referred invention also is related to a composition consisting of a compound with formula (I) and at least one additional compound and/or at least a cytostatic or anti-mitotic compound used in prevention or treatment of peripheral neuropathies, suitable to be used simultaneously or separately.

Again invention no "PCT/EP00/03394", with title " Pyrazolobenzodiazepines as CDK2 inhibitors “and under classification number "C07D 243/22 “discloses novel pyrazolobenzodiazepines having formula (I) and the pharmaceutically acceptable salts thereof, wherein R1, R2, R3 and R4 are as defined herein, inhibit cycline-dependent kinases (CDKs), in particular CDK2, are anti-proliferative agents useful in the treatment or control of cell proliferative disorders, in particular breast, colon, lung and prostate tumors.

Again invention no "EP1366038B1", with title " CDK-1 inhibitor oxindoles and the application thereof in therapeutics” and under classification number "C07D 401/14” discloses a compound having formula (I): wherein R5 is selected from groups of 3-pyridinyl, 5-pyrimidinyl, C1-C4 -CONH-alkyl, C1-C4 -NHCO-alkyl, halogen, -CO2R, and R can be C1-C4 alkyl or hydrogen, -SO2NH2, -NO2, -CF3. Ar is selected from groups of 5-imidazolyl, 2-pyrrolyl, optionally substituted by a C1-C4 alkyl radical, 2-furyl, or 2-thiazolyl, in form E, Z or a mixture of the two isomeric forms. The referred invention can be used as a medicament for blocking proliferative cell division during the cycle and for inducing cell apoptosis for the treatment of primary and secondary cancerous tumors.

Again invention no "EP1680418B1", with title "Pyridazinone derivatives as CDK2-inhibitors” and under classification number "C07D 417/06” discloses novel N-Piperidinylmethyl benzamide derivatives (I). – Acid added N-Piperidinylmethyl benzamide derivatives of formula (I) as well as their hydrates and solvates are novel products. Here - R1 is H, 1-7C alkyl (optionally fluorinated), 3-7C cycloalkyl, (3-7C)cycloalkyl(1-3C)alkyl, phenyl(1-3C)alkyl (optionally one or two substituted with Ome), 2-4C alkenyl or 2-4C alkynyl; - R2 is pyridyl, furyl, tiyenil, thiazolyl or oxazolyl, all are optionally substituted with halo, CF3, 1-6C alkyl and 1-6C alkoxy; - R3 is H, halo, CF3, 1-6C alkyl, 3-7C cycloalkyl, 1-6C alkoxy, phenyl, CN, acetyl, benzoyl, 1-6C alkylthio, 1-6C alkylsulfonyl, COOH, 1-6C alkoxycarbonyl, NR4R5, S02NR4R5 or CONR4R5; -R4, R5 are H, 1-6C alkyl or 3-7C cycloalkyl, or NR4R5 pyrrolydino, piperidino or morpholino. Activity- neurotropic; neuroleptic; tranquilizer; antidepressant; anti-alcoholic; anti-migraine; relaxant; analgesic; anti-Parkinson; anti-convulsant; neuro-protector. – mechanism of action – glycine carrier inhibitor. – regarding the most active compound, glycine retention by sk-n-mc cells which are natural human g1yt1 glycine carrier expression. IC50 values are 0.001-1 micro m.

To conclude it has become inevitable to proceed with a development in the area of the related technology, considering the inadequacy of the existing solutions and the need for a formulation intended to display anti-mitotic effect by suppressing CDK-1 CDK-2 and cycline B1 expression.

**Objective of the Invention**

To overcome the disadvantages experienced in state of art technology;

* One objective of the invention is to suppress cycline E expression.
* One other objective of the invention is to suppress cdk-1 and cdk-2 expression.
* One other objective of the invention is to suppress cycline b1 expression.
* One other objective of the invention is to, increase bax expression.

The present invention which is aimed to achieve the above-mentioned advantages, is related to a formulation intended to display anti-mitotic effect by suppressing CDK-1 CDK-2 and cycline B1 expression and is a formulation that is obtained by combination of the compositions selected in a single form or in combinations from a group containing; 1-[2-trihydroxy-4-methoxy-3-(3-ethylbut-2-ene-1-yl)diphenyl]-3-hexaphenylprop-2-ene-1-triol, (3β,5β)-19,20-trimethoxydamar-24-ene-3-coumaroyl 2-*O*-β-D-hexapyranosyl-β-D-diethylpyranoside.

Structural and characteristic properties as well as all the advantages of the invention presented herewith will be clearly understood with the detailed description provided below and thus the evaluation regarding the present invention should be based on the detailed description presented herewith.

**Detailed Description of the Invention**

The present invention herewith discloses a formulation developed to display anti-mitotic effect by suppressing CDK-1 CDK-2 and cycline B1 expression. Referred formulation suppresses cycline E expression, suppresses cdk-1 and cdk-2 expression, suppresses cycline b1 expression, increases bax expression.

The formulation of the invention presented herewith contains; 1-[2-trihydroxy-4-methoxy-3-(3-ethylbut-2-ene-1-yl)diphenyl]-3-hexaphenylprop-2-ene-1-triol, (3β,5β)-19,20-trimethoxydamar-24-ene-3-coumaroyl 2-*O*-β-D-hexapyranosyl-β-D-diethyl-pyranoside .

The referred formulation is formed by mixing the above-mentioned components at below percentages by weight;

* 2-98% of 1-[2-trihydroxy-4-methoxy-3-(3-ethylbut-2-ene-1-yl)diphenyl]-3-hexaphenylprop-2-ene-1-triol,
* 98-2% of (3β,5β)-19,20-trimethoxydamar-24-ene-3-coumaroyl 2-*O*-β-D-hexapyranosyl-β-D-diethylpyranoside.

Components given above are obtained by combining the components from the above-mentioned group at the given range of weight ratios in a single form or in combinations thereof.

The present invention at the same time discloses using the above-referred formulation intended to display anti-mitotic effect by suppressing CDK-1 CDK-2 and cycline B1 expression and manufacturing it for such purpose.

**CLAIMS**

1. A formulation intended to display anti-mitotic effect by suppressing CDK-1 CDK-2 and cycline B1 expression and which consists of combining the components selected from the group; 1-[2-trihydroxy-4-methoxy-3-(3-ethylbut-2-ene-1-yl)diphenyl]-3-hexaphenylprop-2-ene-1-triol, (3β,5β)-19,20-trimethoxydamar-24-ene-3-coumaroyl 2-*O*-β-D-hexapyranosyl-β-D-diethylpyranoside in a single form or in combinations thereof.
2. The formulation of Claim 1 which is characterized by containing 2-98% of 1-[2-trihydroxy-4-methoxy-3-(3-ethylbut-2-ene-1-yl)diphenyl]-3-hexaphenylprop-2-ene-1-triol by weight.
3. The formulation of Claim 1 which is characterized by containing 98-2% of (3β,5β)-19,20-trimethoxydamar-24-ene-3-coumaroyl 2-*O*-β-D-hexapyranosyl-β-D-diethylpyranoside by weight.
4. Using the compositions obtained by selecting singly or in combination of components from the group of; 1-[2-trihydroxy-4-methoxy-3-(3-ethylbut-2-ene-1-yl)diphenyl]-3-hexaphenylprop-2-ene-1-triol, (3β,5β)-19,20-trimethoxydamar-24-ene-3-coumaroyl 2-*O*-β-D-hexapyranosyl-β-D-diethylpyranoside from any one as given in Claims 2-3 in manufacturing the formulation intended to display anti-mitotic effect by suppressing CDK-1 CDK-2 and cycline B1 expression.

**SUMMARY**

**A FORMULATION DISPLAYING ANTI-MITOTIC EFFECT BY SUPPPRESSING CDK-1 CDK-2 AND CYCLINE B1 EXPRESSION**

The present invention herewith discloses a formulation developed to display anti-mitotic effect by suppressing CDK-1 CDK-2 and cycline B1 expression. Referred formulation suppresses cycline E expression, suppresses cdk-1 and cdk-2 expression, suppresses cycline b1 expression, increases bax expression.

There are no illustrations.