**Description**

**A FORMULATION INTENDED TO SLOW DOWN THE PROGRESS OF CANCER**

**Field of Invention**

The present invention herewith is related to a formulation developed to slow down the progress of cancer by suppressing cycline B1.

**Background of the Related Technology**

At present it is known that cancer develops with cells growing and reproducing abnormally in the body, which is caused by the damaged DNA in cells. While about 10,000 mutations occur in our body (in DNA) every day, our immune system scans our body every milliseconds and destroys the cancer cells.

In treatment of diseases it is the Immune System of the human body that plays the major role. The first step in a treatment is to remove the factors that lead to weakening of the immune system. Since it is impossible to detect to which extent and where the cancer cells have caused metastasis, in patients that are being treated for cancer, it is desired to strengthen the immune system, to destroy the cancer cells that have spread in the body.

Based on the state of art technology, a physician who is an expert in oncology will be responsible from cancer treatment. Various medical treatment centers have an Oncology Hospital. The state of art technology applies various treatment methods for treating cancer:

1. Surgical method: (To cut and remove the cancer tissue together with a certain part of the surrounding healthy tissue that has a risk of invasion. In certain cases, it might not be possible to remove the cancer tissue with surgery. Then radio-therapy or chemo-therapy is preferred.)
2. Treatment with radio-therapy (radiation): (Killing the cancer cells by targeting them with an appropriate dose of radiation)
3. Chemotherapy: (using medication to kill the cancer cells).
4. Alternative medicine is a pre-medication used to strengthen the Immune System with the purpose of enhancing the main treatment, but since it is a method that is susceptible to marginality, it is a method where its reliability and effectiveness is not proven with controlled experiments.
5. Immunotherapy: Is using the cells of the immune system against cancer in an efficient manner. One example is using BCG in urinary bladder cancers.

In state of art technology, invention no " WO 1999/031140 " , with title "Treatment with Anti-ErbB2 antibodies" and under classification number " C07K 16/32 " discloses methods for treatment of disorders distinguished by extreme expression of ErB2. More specifically the referred invention discloses methods for treatment of cancer, which is suspected that the cancer is responsible from extreme expression of ErbB2 and also is related to using the invention in treatment of the cancer in combination with a chemo-therapy agent that is different from anthracycline, like epirubicin.

Again invention no " WO 1999/061444 " , with title "Pyrimidines and Bicyclic 3,4-dihydropyrimidines as Cell Reproduction Inhibitors” and under classification number " C07D 487/04 " discloses methods for providing bicyclic heterocylics that are useful in treatment of diseases related to cell reproduction like cancer, restenosis as well as angiogenesis and atherosclerosis. We have invented a group of bicyclic compounds that are effective inhibitors of kinases dependent on cycline, kinases mediated by growth factor and kinases which are not receptors. These compounds can by synthesized easily and can be administered to the patient using various methods, including orally administered forms and have sufficient biological suitability for clinical use. The referred invention consists of the compound with formula (I) where Z is N or GH; G is N or CH; W is NH, S,SO or SO2; R1 is phenyl and substituted phenyl; R2 is alkyl and cycloalkyl; R3 is alkyl and hydrogen; R8 and R9 are hydrogen and alkyl as well as pharmaceutically acceptable salts thereof. The referred invention is also related to providing a pharmaceutical formulation that contains the compound with Formula (I) combined with a pharmaceutically acceptable carrier, diluting agent or excipient.

Again invention no "EP1423105B1" , with title "Combinations of Other Agents Used Against DMXAA and Cancer" and under classification number “A61K 31/19 " discloses a synergistic combination formed with a compound selected from platinum compounds, vinca alkaloids, alkylation agents, anthracyclines, topoisomerase I inhibitors, anti-metabolites and topoisomerase II inhibitors, which have act against 5,6-dimethylxanthenone-4-acetic acid (DMXAA) and tumors. The referred invention specifically discloses methods for using such combinations in treatment of cancer and pharmaceutical compounds that contain the combinations referred herewith.

Again invention no " EP1651612B1 " , with title "Using 3,4-Double Substituted 1 h-pyrazole Compounds as Cycline Dependent Kinases (cdk) and Glycogen Synthase Kinase-3 (gsk-3) Modulators" and under classification number "C07D 231/38" involves providing the compound with formula (0), its salts or tautomers or N-oxides or solvates intended to be used in prophylaxis or treatment of diseases or cases like cycline dependent kinase and glycogen synthase kinase-3 mediated cancers.

Again invention no "WO 1999/062882" , with title "Substituted Indolinone and Manufacturing and Using Them as Medication” and under classification number " C07D 209/30 " discloses substituted indolines with formula (I) where R1 through R5 and X are as defined in Claim 1 as well as their isomers and salts, particularly their physiologically suitable salt which are displaying valuable pharmaceutical characteristics, and specifically those that have a suppressing capability over various kinases and cycline/CDK complexes and various tumor cell growth. The referred invention also involves medication that contains this compound, their use and methods for production of the compound described herewith.

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 for slowing the progress of cancer.

**Objective of the Invention**

To overcome the disadvantages experienced in state of art technology;

* One objective of the present invention is to suppress cycline B1 expression.
* One other objective of the invention is to have it display systemic and anti-mitotic action

The present invention which is aimed to achieve the above-mentioned advantages, is intended for slowing down the progress of cancer and is a formulation that is obtained by combination of the compositions selected in a single form or in combinations from a group containing; 1H-cyclopenta[a]phenylanthroyl-4-yl]oxy]-6-(dimethoxyethyl)oxane-3-yl]oxy-8-(dihydroxyethyl)oxane-3,5,7-trione, (3β,5β)-19,20-trimethoxydamar-24-ene-3-coumaroyl 2-O-β-D-hexapyranosyl-β-D-diethylpyranoside,   (3β,10β)-12,20-hexahydroxydamar-20-ene-4-caffeoyl 7-O-β-D-glucopyranosyl-β-D-trihydroxypyranoside.

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 is related to a formulation developed with the aim of slowing down the progress of cancer by suppressing cycline B1. Referred formulation suppresses cycline B1 expression and displays systemic and anti-mitotic action.

The formulation of the invention presented herewith contains; 1H-cyclopenta [a]phenylanthroyl-4-yl]oxy]-6-(dimethoxyethyl)oxane-3-yl]oxy-8-(dihydroxyethyl)oxane -3,5,7-trione, (3β,5β)-19,20-trimethoxydamar-24-ene-3-coumaroyl 2-O-β-D-hexa pyranosyl-β-D-diethylpyranoside,   (3β,10β)-12,20-hexahydroxydamar-20-ene-4-caffeoyl 7-O-β-D-glucopyranosyl-β-D-trihydroxypyranoside .

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

* 22-40% of 1H-cyclopenta[a]phenylanthroyl-4-yl]oxy]-6-(dimethoxyethyl)oxane-3-yl]oxy-8-(dihydroxyethyl)oxane-3,5,7-trione,
* 38-22% of (3β,5β)-19,20-trimethoxydamar-24-ene-3-coumaroyl 2-O-β-D-hexapyranosyl-β-D-diethylpyranoside,
* 40-38% of (3β,10β)-12,20-hexahydroxydamar-20-ene-4-caffeoyl 7-O-β-D-glucopyranosyl-β-D-trihydroxypyranoside.

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 is related to using the above-referred formulation for slowing the progress of cancer and manufacturing it for such purpose.

**CLAIMS**

1. A formulation intended for slowing down the progress of cancer by suppressing cycline B1, which consists of combining the components selected from the group; 1H-cyclopenta[a]phenylanthroyl-4-yl]oxy]-6-(dimethoxyethyl)oxane-3-yl]oxy-8-(dihydroxyethyl)oxane-3,5,7-trione, (3β,5β)-19,20-trimethoxydamar-24-ene-3-coumaroyl 2-O-β-D-hexapyranosyl-β-D-diethylpyranoside,   (3β,10β)-12,20-hexahydroxydamar-20-ene-4-caffeoyl 7-O-β-D-glucopyranosyl-β-D-trihydroxypyranoside in a single form or in combinations thereof
2. The formulation of Claim 1 which is characterized by containing 22-40% of 1H-cyclopenta[a]phenylanthroyl-4-yl]oxy]-6-(dimethoxyethyl)oxane-3-yl]oxy-8-(dihydroxyethyl)oxane-3,5,7-trione by weight.
3. The formulation of Claim 1 which is characterized by containing 38-22% of (3β,5β)-19,20-trimethoxydamar-24-ene-3-coumaroyl 2-O-β-D-hexapyranosyl-β-D-diethylpyranoside by weight.
4. The formulation of Claim 1 which is characterized by containing 40-38% of (3β,10β)-12,20-hexahydroxydamar-20-ene-4-caffeoyl 7-O-β-D-glucopyranosyl-β-D-trihydroxypyranoside by weight.
5. Using the compositions obtained by selecting singly or in combination of components from the group of; 1H-cyclopenta[a]phenylanthroyl-4-yl]oxy]-6-(dimethoxyethyl)oxane-3-yl]oxy-8-(dihydroxyethyl)oxane-3,5,7-trione, (3β,5β)-19,20-trimethoxydamar-24-ene-3-coumaroyl 2-O-β-D-hexapyranosyl-β-D-diethylpyranoside,   (3β,10β)-12,20-hexahydroxydamar-20-ene-4-caffeoyl 7-O-β-D-glucopyranosyl-β-D-trihydroxypyranoside from any one as given in Claims 2-4 in manufacturing the formulation intended for slowing down the progress of cancer by suppressing cycline B1.

**SUMMARY**

**A FORMULATION INTENDED TO SLOW DOWN THE PROGRESS OF CANCER**

The present invention is related to a formulation developed with the aim of slowing down the progress of cancer by suppressing cycline B1. Referred formulation suppresses cycline B1 expression and displays systemic and anti-mitotic action.

There are no illustrations.