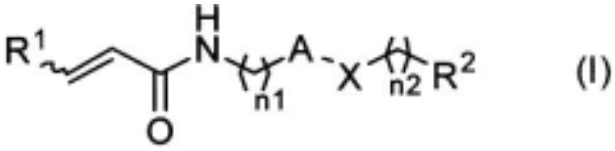
[CLAIMS]

[1] An α,β-unsaturated amide compound or a pharmaceutically acceptable salt thereof represented by the following formula (I):

[Chemical formula 1]



(I)

wherein,

"A" represents optionally substituted heterocyclic diyl,

R^1 represents hydrogen atom or optionally substituted lower alkyl,

R^2 represents optionally substituted aryl, optionally substituted cycloalkyl, optionally substituted aliphatic heterocyclic group or optionally substituted aromatic heterocyclic group,

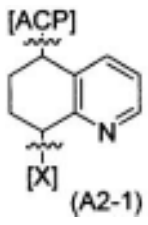
X represents -O-, -S-, -SO_2-, -NR^{X1}- (wherein, R^{X1} represents hydrogen atom or lower alkyl), -CHR^{X2}- (wherein, R^{X2} represents hydrogen atom or hydroxy), -CH=CH-, -CO- or -NH-CO-, and

n1 and n2 are the same or different, and each represents 0 or 1,

wherein the heterocyclic diyl in the optionally substituted heterocyclic diyl is heterocyclic diyl selected from the group consisting of,

(a) 5,6,7,8-tetrahydroquinolinediyl, represented by the following formula (A2-1):

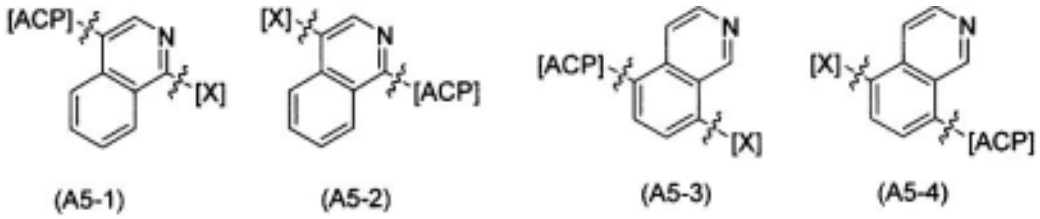
[Chemical formula 2]



(A2-1)

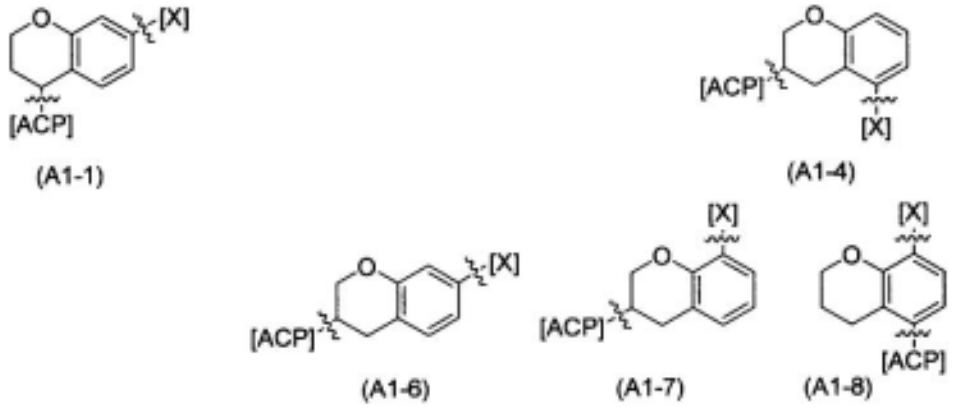
(b) isoquinolinediyl, selected from the group consisting of the following formulae (A5-1), (A5-2), (A5-3) and (A5-4):

[Chemical formula 3]



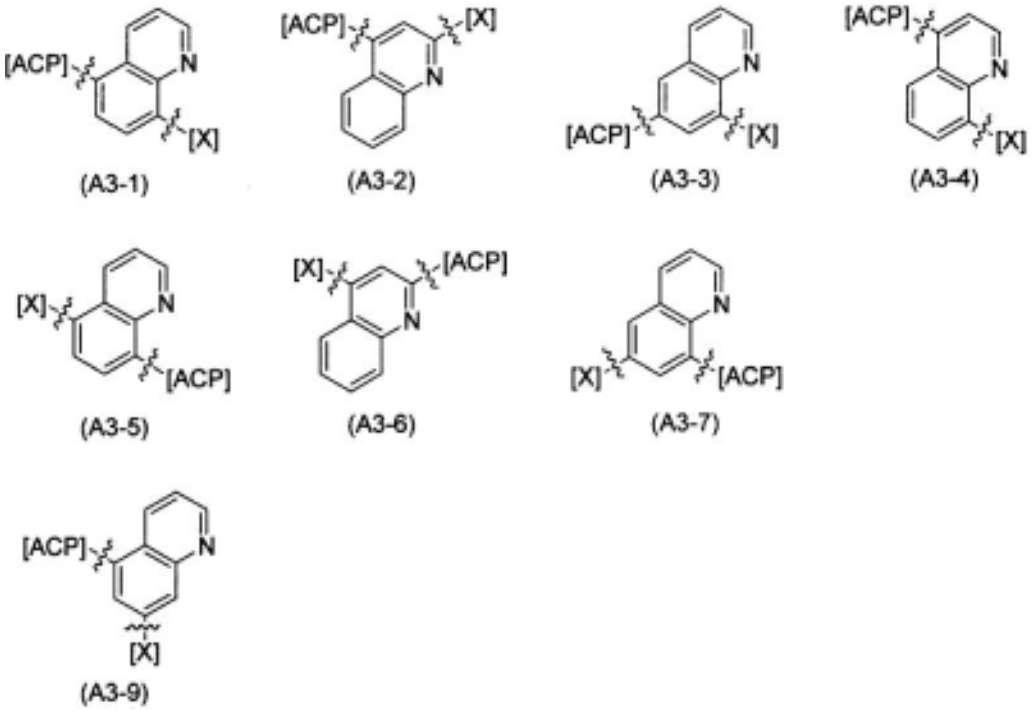
(c) the group consisting of the following formulae (A1-1), (A1-4), (A1-6), (A1-7) and (A1-8):

[Chemical formula 4]



(d) the group consisting of the following formulae (A3-1), (A3-2), (A3-3), (A3-4), (A3-5), (A3-6), (A3-7) and (A3-9):

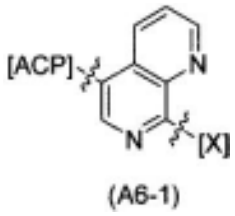
[Chemical formula 5]



, and

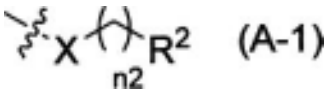
(e) the following formula (A6-1):

[Chemical formula 6]



wherein, -[X] represents bonding position of the group represented in formula (A-1):

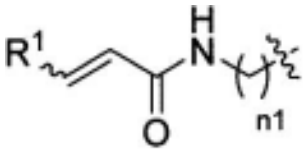
[Chemical formula 7]



wherein, X, R^2 and n2 are each the same as earlier defined,

-[ACP] represents bonding position of the group represented in formula (A-2):

[Chemical formula 8]



(A-2)

wherein, R^1 and n1 are each the same as earlier defined.

[2] The α,β-unsaturated amide compound or a pharmaceutically acceptable salt thereof according to claim 1, wherein the heterocyclic diyl in the optionally substituted heterocyclic diyl is heterocyclic diyl represented by the formula (A2-1).

[3] The α,β-unsaturated amide compound or a pharmaceutically acceptable salt thereof according to claim 1, wherein the heterocyclic diyl in the optionally substituted heterocyclic diyl is heterocyclic diyl selected from the group consisting of the formulae (A5-1), (A5-2), (A5-3) and (A5-4).

[4] The α,β-unsaturated amide compound or a pharmaceutically acceptable salt thereof according to any one of claims 1 to 3, wherein R^1 is hydrogen atom.

[5] The α,β-unsaturated amide compound or a pharmaceutically acceptable salt thereof according to any one of claims 1 to 4, wherein R^2 is optionally substituted aryl or optionally substituted aromatic heterocyclic group.

[6] The α,β-unsaturated amide compound or a pharmaceutically acceptable salt thereof according to any one of claims 1 to 5, wherein n1 is 0.

[7] The α,β-unsaturated amide compound or a pharmaceutically acceptable salt thereof according to any one of claims 1 to 5, wherein n1 is 1.

[8] The α,β-unsaturated amide compound or a pharmaceutically acceptable salt thereof according to any one of claims 1 to 7, wherein n2 is 0.

[9] The α,β-unsaturated amide compound or a pharmaceutically acceptable salt thereof according to any one of claims 1 to 8, wherein X is -O-.

[10] A pharmaceutical composition comprising the α,β-unsaturated amide compound or a pharmaceutically acceptable salt thereof according to any one of claims 1 to 9 and a carrier.

[11] The pharmaceutical composition according to claim 10 for use in the treatment or prevention of cancer.

[12] The pharmaceutical composition for use according to claim 11, wherein the cancer is one or two or more selected from the group consisting of mesothelioma, lung cancer, ovarian cancer, and liver cancer.

[13] The α,β-unsaturated amide compound or a pharmaceutically acceptable salt thereof according to any one of claims 1 to 9 for use as a medicine.

[14] The α,β-unsaturated amide compound or a pharmaceutically acceptable salt thereof according to any one of claims 1 to 9 for use in the treatment or prevention of cancer.

[15] The α,β-unsaturated amide compound or a pharmaceutically acceptable salt thereof for use according to claim 14, wherein the cancer is one or two or more selected from the group consisting of lung cancer, ovarian cancer, and liver cancer.

[16] Use of the α,β-unsaturated amide compound or a pharmaceutically acceptable salt thereof according to any one of claims 1 to 9 in the manufacture of a medicine for treating or preventing cancer.

[17] The use according to claim 16, wherein the cancer is one or two or more selected from the group consisting of lung cancer, ovarian cancer, and liver cancer.