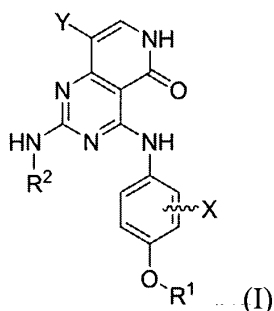


Claims

[Claim 1]

A use of a compound represented by Formula (I) or a pharmaceutically acceptable salt thereof, as an Axl inhibitor for the treatment of a disease or condition mediated by Axl:



wherein

R¹ is C₆-C₁₀aryl, C₆-C₁₀arylC₁-C₆alkyl, C₅-C₆cycloalkyl or C₅-C₆cycloalkylmethyl, optionally substituted with one or two R³s;

R³ is independently fluoro, chloro, bromo, iodo, C₁-C₆alkyl, or trifluoromethyl;

X is H, fluoro, chloro, bromo, iodo, methyl, or trifluoroethyl;

Y is chloro, bromo, iodo, C₁-C₃alkyl, or phenyl;

R² is C₃-C₆cycloalkyl or 4 to 7-membered heterocycloalkyl, wherein the C₃-C₆cycloalkyl is optionally substituted at carbon atoms with one or two R⁴s, and wherein the 4 to 7-membered heterocycloalkyl has 1 or 2 heteroatoms selected from the group consisting of nitrogen, oxygen, sulfur, sulfone and sulfoxide, and is optionally substituted at carbon atom with R⁴ or at nitrogen atom with R⁵;

R⁴ is independently hydroxy, hydroxyC₁-C₆alkyl, amino, aminoC₁-C₆alkyl, -NH(-C₁-C₃alkyl), -N(-C₁-C₃alkyl)₂, C₁-C₃alkyl or halo; and

R⁵ is H, C₁-C₃alkyl or -C(=O)(-C₁-C₃alkyl), wherein the C₁-C₃alkyl is optionally substituted with 1 to 3 fluoros.

[Claim 2]

The use of claim 1, wherein R¹ is phenyl, benzyl, cyclopentyl, cyclohexyl, cyclopentylmethyl, or cyclohexylmethyl, optionally substituted with one or two R³s; and R³ is independently fluoro, chloro, bromo, iodo, C₁-C₆alkyl, or trifluoromethyl.

[Claim 3]

The use of claim 1, wherein R² is piperidinyl or pyrrolidinyl substituted at nitrogen atom with R⁵; and R⁵ is H, C₁-C₃alkyl or -C(=O)(-C₁-C₃alkyl).

[Claim 4]

The use of claim 1, where R⁵ is methyl, ethyl, trifluoroethyl, or *i*-propyl.

[Claim 5]

The use of claim 1, wherein R³ is independently chloro or fluoro.

[Claim 6]

The use of claim 1, wherein Y is bromo.

[Claim 7]

The use of claim 1, wherein X is fluoro or methyl.

[Claim 8]

The use of claim 1, wherein the compound of Formula (I) or a pharmaceutically acceptable salt thereof is 8-bromo-2-((1-methylpiperidin-4-yl)amino)-4-((4-phenoxyphenyl)amino)pyrido[4,3-d]pyrimidin-5(6H)-one hydrochloride.

[Claim 9]

The use of claim 1, wherein the compound of Formula (I) or a pharmaceutically acceptable salt thereof is 8-bromo-4-((4-(cyclopentyloxy)phenyl)amino)-2-((1-methylpiperidin-4-yl)amino)pyrido[4,3-d]pyrimidin-5(6H)-one hydrochloride; or 8-bromo-4-((4-(3-fluorophenoxy)phenyl)amino)-2-((1-methylpiperidin-4-yl)amino)pyrido[4,3-d]pyrimidin-5(6H)-one hydrochloride.

[Claim 10]

The use of claim 1, wherein the compound of Formula (I) comprises a

stereoisomer thereof.

[Claim 11]

A use of a compound of Formula (I) as defined in claim 1 or a pharmaceutically acceptable salt thereof, for preparing a medicament for the treatment of a disease or condition mediated by Axl.

[Claim 12]

The use of claim 1 or 11, wherein the disease or condition is multiple types of cancer mediated by Axl.

[Claim 13]

The use of claim 1 or 11, wherein the disease or condition is acute lymphoblastic leukemia, acute myeloid leukemia, adrenocortical carcinoma, aids-related cancers, aids-related lymphoma, anal cancer, appendix cancer, astrocytomas, atypical teratoid/rhabdoid tumor, basal cell carcinoma, bile duct cancer, bladder cancer, bone cancer, osteosarcoma and malignant fibrous histiocyoma, brain stem glioma, brain tumor, central nervous system atypical teratoid/rhabdoid tumor, astrocytomas, craniopharyngioma, ependymoblastoma, ependymoma, medulloblastoma, medulloepithelioma, pineal parenchymal tumors of intermediate differentiation, supratentorial primitive neuroectodermal tumors and pineoblastoma, brain and spinal cord tumors, breast cancer, bronchial tumors, burkitt lymphoma, carcinoid tumor, gastrointestinal cancer, central nervous system lymphoma, cervical cancer, chordoma, chronic lymphocytic leukemia, chronic myelogenous leukemia, chronic myeloproliferative disorders, colon cancer, colorectal cancer, craniopharyngioma, cutaneous t-cell lymphoma, mycosis fungoides, sezary syndrome, endometrial cancer, ependymoblastoma, ependymoma, esophageal cancer, esthesioneuroblastoma, ewing sarcoma family of tumors, extracranial germ cell tumor, extragonadal germ cell tumor, extrahepatic bile duct cancer, intraocular melanoma, retinoblastoma, gallbladder cancer, gastric cancer, gastrointestinal carcinoid tumor, gastrointestinal stromal tumor, gastrointestinal stromal cell tumor, extracranial germ cell tumor, extragonadal germ cell

tumor, ovarian germ cell tumor, gestational trophoblastic tumor, glioma, hairy cell leukemia, head and neck cancer, heart cancer, hepatocellular cancer, histiocytosis, hodgkin lymphoma, hypopharyngeal cancer, intraocular melanoma, islet cell tumors, kaposi sarcoma, renal cell cancer, kidney cancer, langerhans cell histiocytosis, laryngeal cancer, acute lymphoblastic leukemia, acute myeloid leukemia, chronic lymphocytic leukemia, chronic myelogenous leukemia, leukemia, lip and oral cavity cancer, liver cancer, lung cancer, non-small cell lung cancer, small cell lung cancer, aids-related lymphoma, burkitt lymphoma, cutaneous t-cell lymphoma, Hodgkin lymphoma, non-hodgkin lymphoma, primary central nervous system lymphoma, macroglobulinemia, malignant fibrous histiocytoma of bone and osteosarcoma, medulloblastoma, medulloepithelioma, melanoma, intraocular melanoma, merkel cell carcinoma, mesothelioma, metastatic squamous neck cancer with occult primary, mouth cancer, multiple endocrine neoplasia syndromes, multiple myeloma, plasma cell neoplasm, myelodysplastic syndromes, myelodysplastic/myeloproliferative neoplasms, myelogenous leukemia, myeloid leukemia, myeloproliferative disorders, nasal cavity and paranasal sinus cancer, nasopharyngeal cancer, neuroblastoma, non-hodgkin lymphoma, non-small cell lung cancer, oral cancer, oral cavity cancer, oropharyngeal cancer, osteosarcoma and malignant fibrous histiocytoma of bone, ovarian cancer, ovarian epithelial cancer, ovarian germ cell tumor, ovarian low malignant potential tumor, pancreatic cancer, papillomatosis, parathyroid cancer, penile cancer, pharyngeal cancer, pineoblastoma and supratentorial primitive neuroectodermal tumors, pituitary tumor, pleuropulmonary blastoma, pregnancy and breast cancer, prostate cancer, rectal cancer, renal cell cancer, transitional cell cancer, respiratory tract cancer, retinoblastoma, rhabdomyosarcoma, salivary gland cancer, sarcoma, ewing sarcoma, kaposi sarcoma, uterine sarcoma, nonmelanoma skin cancer, melanoma skin cancer, skin carcinoma, small cell lung cancer, small intestine cancer, soft tissue sarcoma, squamous cell carcinoma, squamous neck cancer, stomach cancer, supratentorial primitive neuroectodermal tumors, t-cell lymphoma, testicular cancer, throat cancer, thymoma and thymic carcinoma, thyroid cancer, transitional cell cancer of the renal pelvis and ureter, trophoblastic tumor, gestational cancer, ureter and renal pelvis cancer, transitional cell cancer, urethral cancer, uterine cancer, endometrial cancer, uterine

sarcoma, vaginal cancer, vulvar cancer, Waldenstrom macroglobulinemia, or Wilms tumor.

[Claim 14]

A pharmaceutical composition comprising a compound of Formula (I) as defined in any one of claims 1 to 10 or a pharmaceutically acceptable salt thereof, in combination with a pharmaceutically acceptable carrier, diluent, adjuvant or excipient.

[Claim 15]

A pharmaceutical composition comprising a compound of Formula (I) as defined in any one of claims 1 to 10 or a pharmaceutically acceptable salt thereof as an active ingredient, for the treatment of a disease or condition mediated by Axl.