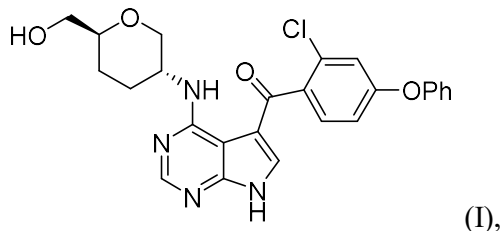


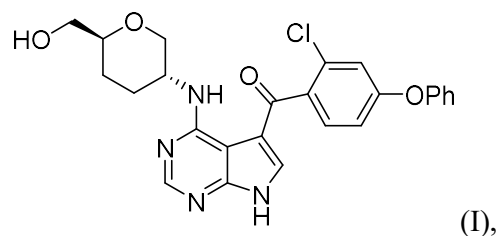
CLAIMS

1. A compound of Formula (I):

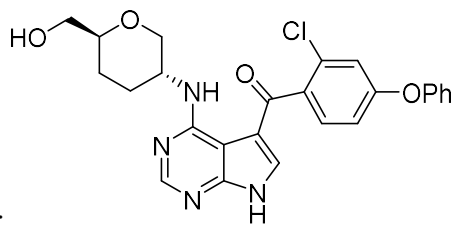


or a pharmaceutically acceptable salt, tautomer, or solvate thereof.

2. A compound of Formula (I):



or a pharmaceutically acceptable salt thereof.



3. A compound of Formula (I):

4. A pharmaceutical composition comprising a compound of claim 1 or a pharmaceutically acceptable salt, tautomer, or solvate thereof, or a compound of claim 2 or a pharmaceutically acceptable salt thereof, or a compound of claim 3, and a pharmaceutically acceptable diluent, excipient or carrier.

5. A pharmaceutical composition for treating a BTK-mediated disorder in a patient, or for modulating BTK in a patient, the composition comprising a therapeutically effective amount of a compound of claim 1 or a pharmaceutically acceptable salt, tautomer, or solvate thereof, or a compound of claim 2 or a pharmaceutically acceptable salt thereof, or a compound of claim 3.

6. The pharmaceutical composition of claim 5, wherein the BTK-mediated disorder is selected from immune disorders, cancer, cardiovascular diseases, viral infections, inflammation, metabolism/endocrine function disorders and neurological disorders.
7. The pharmaceutical composition of claim 6, wherein the cancer is selected from a cancer of the breast, ovary, cervix, prostate, testis, esophagus, larynx, stomach, skin, lung, bone, pancreas, colon, thyroid, biliary passage, hairy cells, buccal cavity, naso-pharyngeal, lip, tongue, mouth, large intestine, small intestine, colon-rectum, rectum, brain and central nervous system, bronchus, liver, intrahepatic bile duct, urinary bladder, uterine corpus, kidney, renal pelvis, oral cavity, pharynx, glioblastoma, neuroblastoma, keratoacanthoma, epidermoid carcinoma, large cell carcinoma, non-small cell lung carcinoma (NSCLC), small cell carcinoma, lung adenocarcinoma, adenoma, adenocarcinoma, follicular carcinoma, undifferentiated carcinoma, papillary carcinoma, seminoma, melanoma, sarcoma, bladder carcinoma, liver carcinoma, kidney carcinoma, myeloid disorders, lymphoma, Hodgkin's leukemia, hepatocellular cancer, glioma, endometrial cancer, multiple myeloma, acute myelogenous leukemia, chronic myelogenous leukemia, lymphocytic leukemia, chronic lymphoid leukemia (CLL), myeloid leukemia, non-Hodgkin lymphoma, and villous colon adenoma.
8. The pharmaceutical composition of claim 6, wherein the cancer is chronic lymphoid leukemia.
9. The pharmaceutical composition of claim 6, wherein the cancer is lymphoma.
10. The pharmaceutical composition of claim 9, wherein the lymphoma is non-Hodgkin lymphoma.
11. The pharmaceutical composition of claim 9, wherein the lymphoma is B-cell lymphoma.
12. The pharmaceutical composition of claim 11, wherein the B-cell lymphoma is B-cell non-Hodgkin lymphoma.
13. The pharmaceutical composition of claim 9, wherein the lymphoma is anaplastic large cell lymphoma.
14. The pharmaceutical composition of claim 9, wherein the lymphoma is central nervous system (CNS) lymphoma.

15. The pharmaceutical composition of claim 14, wherein the CNS lymphoma is primary CNS lymphoma.
16. The pharmaceutical composition of claim 9, wherein the lymphoma is Waldenstrom macroglobulinemia.
17. The pharmaceutical composition of claim 6, wherein the cancer is myeloid disorders.
18. The pharmaceutical composition of claim 6, wherein the cancer is myeloid leukemia.
19. The pharmaceutical composition of claim 6, wherein the cancer is acute myelogenous leukemia.
20. The pharmaceutical composition of claim 6, wherein the cancer is multiple myeloma.
21. The pharmaceutical composition of claim 6, wherein the cancer is lymphocytic leukemia.
22. The pharmaceutical composition of claim 6, wherein the cancer is sarcoma.
23. The pharmaceutical composition of claim 6, wherein the cancer is brain tumor.
24. The pharmaceutical composition of claim 5, wherein the BTK-mediated disorder is rheumatoid arthritis, systemic and local inflammation, arthritis, inflammation related to immune suppression, organ transplant rejection, allergies, ulcerative colitis, Crohn's disease, dermatitis, asthma, systemic lupus erythematosus, Sjogren's Syndrome, multiple sclerosis, scleroderma/systemic sclerosis, idiopathic thrombocytopenic purpura (ITP), anti-neutrophil cytoplasmic antibodies (ANCA) vasculitis, chronic obstructive pulmonary disease (COPD), or psoriasis.
25. Use of a compound of claim 1 or a pharmaceutically acceptable salt, tautomer, or solvate thereof, or a compound of claim 2 or a pharmaceutically acceptable salt thereof, or a compound of claim 3, or a pharmaceutical composition of claim 4 in the manufacture of a medicament for treating a BTK-mediated disorder or for modulating BTK.

26. The use of claim 25, wherein the BTK-mediated disorder is selected from immune disorders, cancer, cardiovascular diseases, viral infections, inflammation, metabolism/endocrine function disorders and neurological disorders.
27. The use of claim 26, wherein the cancer is selected from a cancer of the breast, ovary, cervix, prostate, testis, esophagus, larynx, stomach, skin, lung, bone, pancreas, colon, thyroid, biliary passage, hairy cells, buccal cavity, naso-pharyngeal, lip, tongue, mouth, large intestine, small intestine, colon-rectum, rectum, brain and central nervous system, bronchus, liver, intrahepatic bile duct, urinary bladder, uterine corpus, kidney, renal pelvis, oral cavity, pharynx, glioblastoma, neuroblastoma, keratoacanthoma, epidermoid carcinoma, large cell carcinoma, non-small cell lung carcinoma (NSCLC), small cell carcinoma, lung adenocarcinoma, adenoma, adenocarcinoma, follicular carcinoma, undifferentiated carcinoma, papillary carcinoma, seminoma, melanoma, sarcoma, bladder carcinoma, liver carcinoma, kidney carcinoma, myeloid disorders, lymphoma, Hodgkin's leukemia, hepatocellular cancer, glioma, endometrial cancer, multiple myeloma, acute myelogenous leukemia, chronic myelogenous leukemia, lymphocytic leukemia, chronic lymphoid leukemia (CLL), myeloid leukemia, non-Hodgkin lymphoma, and villous colon adenoma.
28. The use of claim 26, wherein the cancer is chronic lymphoid leukemia.
29. The use of claim 26, wherein the cancer is lymphoma.
30. The use of claim 29, wherein the lymphoma is non-Hodgkin lymphoma.
31. The use of claim 29, wherein the lymphoma is B-cell lymphoma.
32. The use of claim 31, wherein the B-cell lymphoma is B-cell non-Hodgkin lymphoma.
33. The use of claim 29, wherein the lymphoma is anaplastic large cell lymphoma.
34. The use of claim 29, wherein the lymphoma is central nervous system (CNS) lymphoma.
35. The use of claim 34, wherein the CNS lymphoma is primary CNS lymphoma.
36. The use of claim 29, wherein the lymphoma is Waldenstrom macroglobulinemia.
37. The use of claim 26, wherein the cancer is myeloid disorders.

38. The use of claim 26, wherein the cancer is myeloid leukemia.
39. The use of claim 26, wherein the cancer is acute myelogenous leukemia.
40. The use of claim 26, wherein the cancer is multiple myeloma.
41. The use of claim 26, wherein the cancer is lymphocytic leukemia.
42. The use of claim 26, wherein the cancer is sarcoma.
43. The use of claim 26, wherein the cancer is brain tumor.
44. The use of claim 25, wherein the BTK-mediated disorder is rheumatoid arthritis, systemic and local inflammation, arthritis, inflammation related to immune suppression, organ transplant rejection, allergies, ulcerative colitis, Crohn's disease, dermatitis, asthma, systemic lupus erythematosus, Sjogren's Syndrome, multiple sclerosis, scleroderma/systemic sclerosis, idiopathic thrombocytopenic purpura (ITP), anti-neutrophil cytoplasmic antibodies (ANCA) vasculitis, chronic obstructive pulmonary disease (COPD), or psoriasis.