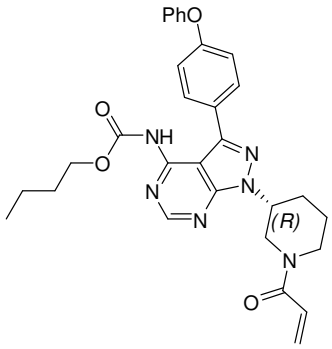
CLAIMS

1. A crystalline form Form II of a pyrazolopyrimidine ester compound of the structure of formula (I)



(I)

having characteristic peaks expressed in degrees 2θ at 5.53°, 9.82°, 10.76°, 17.87°, 20.55°, 21.28°, 21.92° and 25.15° in its X-ray powder diffraction (XRPD) pattern, wherein the error range of degrees 2θ is ± 0.20°, and the XRPD pattern is obtained using Cu-Kα radiation.

2. The crystalline form Form II of the pyrazolopyrimidine ester compound according to claim 1, having characteristic peaks expressed in degrees 2θ at 5.53°, 9.82°, 10.76°, 14.25°, 14.81°, 16.72°, 17.87°, 18.33°, 19.06°, 19.67°, 20.55°, 20.78°, 21.28°, 21.92°, 22.93°, 23.38°, 23.85°, 25.15°, 26.09°, 26.51°, 26.97°, 27.52°, 27.90°, 28.37°, 29.00°, 29.70°, 31.57°, 32.57°, 33.94° and 36.71° in the XRPD pattern, wherein the error range of degrees 2θ is ± 0.20°.

3. The crystalline form Form II of the pyrazolopyrimidine ester compound according to claim 2, having an XRPD pattern as shown in Fig. 1.

4. The crystalline form Form II of the pyrazolopyrimidine ester compound according to claim 1, wherein the crystalline form is an irregularly shaped crystalline form and has an endothermic peak at 129.59 °C in its differential scanning calorimetry (DSC) curve, wherein the error range of the endothermic peak temperature is ± 1.00 °C.

5. The crystalline form Form II of the pyrazolopyrimidine ester compound according to claim 4, having a DSC curve as shown in Fig. 2.

6. The crystalline form Form II of the pyrazolopyrimidine ester compound according to claim 1, having characteristic absorption bands at wavenumbers of 1030, 1078, 1138, 1197, 1233, 1277, 1376, 1445, 1455, 1488, 1504, 1556, 1588, 1606, 1642, 1750, 2865, 2897, 2928, 2954, 3012, 3027, 3044, 3076, 3166 and 3195 cm^{-1} in its infrared (IR) spectrum, wherein the error range of the absorption band peaks is ± 2 cm^{-1}.

7. The crystalline form Form II of the pyrazolopyrimidine ester compound according to claim 6, having an IR spectrum as shown in Fig. 3.

8. A method of preparing the crystalline form Form II of the pyrazolopyrimidine ester compound according to any one of claims 1 to 7, the method comprising the steps of:

dissolving the pyrazolopyrimidine ester compound of the structure of formula (I) in a good solvent; then adding a poor solvent to precipitate a solid; and stirring, followed by filtering and drying, affording the pyrazolopyrimidine ester compound in the crystalline form Form II,

wherein the pyrazolopyrimidine ester compound of the structure of formula (I) is amorphous or in a crystalline form Form I, the crystalline form Form I having characteristic peaks expressed in degrees 2θ at 11.26°, 14.03°, 14.80°, 17.07°, 19.78°, 21.21°, 22.39° and 23.85° in its XRPD pattern;

wherein the good solvent is selected from acetone, 2-methyltetrahydrofuran, methanol, acetonitrile, ethyl acetate and tetrahydrofuran, and the poor solvent is selected from *n*-heptane, methyl *tert*-butyl ether, water and cyclohexane; and the good solvent is used at a volume-to-weight ratio of 5-10 to the compound of formula (I), and the poor solvent is used at a volume-to-weight ratio of 10-150 to the compound of formula (I).

9. The method of preparing the crystalline form Form II of the pyrazolopyrimidine ester compound according to claim 8, wherein the poor solvent is added slowly in batches.

10. Use of the crystalline form Form II of the pyrazolopyrimidine ester compound according to any one of claims 1 to 7 in the preparation of a medicament for treating lymphoma and lymphocytic leukemia.