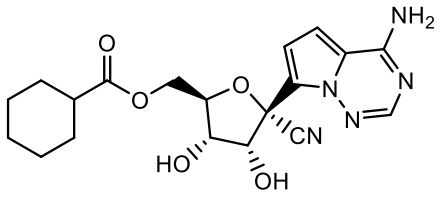
What is claimed is:

1. A crystalline form of ATV014, a structure of the crystalline form shown as formula ATV-014,



(ATV-014)

and the crystalline form of the ATV014 being crystalline form I, wherein an X-ray powder diffraction pattern of the ATV014 crystalline form I exhibits characteristic peaks at diffraction angles 2θ of 9.69±0.2°, 9.84±0.2°, 17.74±0.2°, 18.70±0.2°, 19.38±0.2°, and 23.88±0.2°.

2. The crystalline form of ATV014 according to claim 1, wherein the X-ray powder diffraction pattern of the ATV014 crystalline form I exhibits characteristic peaks at the diffraction angles 2θ of 9.69±0.2°, 9.84±0.2°, 13.91±0.2°, 15.61±0.2°, 17.74±0.2°, 18.70±0.2°, 19.38±0.2°, 21.31±0.2°, and 23.88±0.2°.

3. The crystalline form of ATV014 according to claim 1, wherein the X-ray powder diffraction pattern of the ATV014 crystalline form I exhibits characteristic peaks at the diffraction angles 2θ of 9.69±0.2°, 9.84±0.2°, 13.91±0.2°, 15.61±0.2°, 17.41±0.2°, 17.74±0.2°, 18.70±0.2°, 19.38±0.2°, 21.31±0.2°, 23.88±0.2°, and 26.01±0.2°.

4. The crystalline form of ATV014 according to claim 1, wherein the X-ray powder diffraction pattern of the ATV014 crystalline form I is substantially as shown in FIG. 1.

5. The crystalline form of ATV014 according to claim 1, wherein a differential scanning calorimetry curve of the ATV014 crystalline form I exhibits an endothermic peak at 212-238 °C; or the differential scanning calorimetry curve of the ATV014 crystalline form I exhibits an endothermic peak at 220-235 °C; or the differential scanning calorimetry curve of the ATV014 crystalline form I exhibits an endothermic peak with a peak value at 226-230 °C; or the differential scanning calorimetry curve of the ATV014 crystalline form I is substantially as shown in the differential scanning calorimetry curve graph in FIG. 2.

6. The crystalline form of ATV014 according to claim 1, wherein a thermogravimetric analysis curve of the ATV014 crystalline form I exhibits a weight loss of less than 1% at 30-200 °C; or the thermogravimetric analysis curve of the ATV014 crystalline form I exhibits a weight loss of less than 0.5% at 30-200 °C; or the thermogravimetric analysis curve of the ATV014 crystalline form I is substantially as shown in the thermogravimetric analysis curve graph in FIG. 2.

7. A method for preparing the crystalline form of the ATV014 according to any one of claims 1-6, comprising dissolving the ATV014 in a good solvent, the ATV014 being in any solid form;

adding an anti-solvent after complete dissolution to precipitate a crystal, followed by filtration and drying to obtain the ATV014 crystalline form I； wherein the good solvent comprises a solvent selected from dimethyl sulfoxide, N-methylpyrrolidone, N,N-dimethylformamide, tetrahydrofuran, dichloromethane, methanol, or a combination thereof; and the anti-solvent comprises a solvent selected from water, methyl tert-butyl ether, or a combination thereof.

8. The preparation method according to claim 7, wherein the good solvent is dimethyl sulfoxide, N-methylpyrrolidone, or a combination thereof, and the anti-solvent is water; or the good solvent is tetrahydrofuran, and the anti-solvent is water or methyl tert-butyl ether or a combination thereof; or the good solvent is a mixed solvent of dichloromethane and methanol, and the anti-solvent is methyl tert-butyl ether.

9. A pharmaceutical composition, comprising a therapeutically effective amount of the compound ATV014 crystalline form according to any one of claims 1-6, and a pharmaceutically acceptable excipient.

10. Use of the crystalline form of the compound ATV014 according to any one of claims 1-6 or the pharmaceutical composition according to claim 9 in the preparation of a drug for preventing, alleviating, and/or treating diseases or symptoms associated with viral infections.