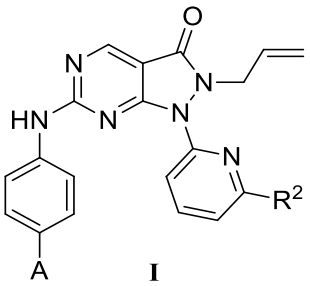
[0004a] In a first aspect, the present disclosure refers to a pyrazolopyrimidine compound represented by formula **I**, a pharmaceutically acceptable salt thereof, a solvate thereof, or a solvate of the pharmaceutically acceptable salt thereof:



I

wherein, A is C_3-C_{20} cycloalkyl substituted by one R^1;

R^1 is C_3-C_{14} heterocycloalkyl optionally substituted by one, two or three $R^{1\text{-}8}$;

each R^{1-8} is independently halogen, -OH, amino, mercapto, cyano, C_1-C_7 alkyl, C_1-C_7 alkoxy, C_1-C_7 alkylthio, C_2-C_7 alkenyl, C_2-C_7 alkynyl, C_3-C_{14} cycloalkyl, C_3-C_{14} heterocycloalkyl, C_6-C_{10} aryl, C_1-C_7 heteroaryl or "amino substituted by one or two R^{1-8-1}"; each R^{1-8-1} is independently C_1-C_7 alkyl or C_3-C_{14} cycloalkyl;

R^2 is -OR^{2-1}, cyano, carboxyl; or "C_2-C_7 alkyl, C_3-C_{14} cycloalkyl or C_3-C_{14} heterocycloalkyl" optionally substituted by one, two or three R^{2-2};

R^{2-1} is C_1-C_7 alkyl, C_2-C_7 alkenyl, C_2-C_7 alkynyl, C_3-C_{14} cycloalkyl, C_3-C_{14} heterocycloalkyl, or C_6-C_{10} aryl; and

each R^{2-2} is independently halogen, hydroxyl, amino, C_1-C_7 alkyl, C_1-C_7 alkoxy, C_3-C_{14} cycloalkyl or C_3-C_{14} heterocycloalkyl;

in any one of the above cases, the heteroatoms in the C_3-C_{14} heterocycloalkyl, C_1-C_7 heteroaryl are independently selected from one or more of boron, silicon, oxygen, sulfur, selenium, nitrogen and phosphorus; the number of heteroatoms is independently 1, 2, 3 or 4.

[0004b] In another aspect, the present disclosure refers to a pharmaceutical composition comprising the pyrazolopyrimidine compound represented by formula **I** disclosed herein, the pharmaceutically acceptable salt thereof, the solvate thereof, or the solvate of the pharmaceutically acceptable

salt thereof.

[0004c] In yet another aspect, the present disclosure refers to a combination comprising the pyrazolopyrimidine compound represented by formula **I** disclosed herein, the pharmaceutically acceptable salt thereof, the solvate thereof, or the solvate of the pharmaceutically acceptable salt thereof.

[0004d] In a further aspect, the present disclosure refers to a use of the combination disclosed herein in the preparation of a medicament for preventing and/or treating cancer.

[0004e] In yet another aspect, the present disclosure refers to a use of an anticancer drug in the preparation of a medicament for preventing and/or treating cancer, wherein the medicament is to be administered in combination with the pyrazolopyrimidine compound represented by formula **I** disclosed herein, the pharmaceutically acceptable salt thereof, the solvate thereof, or the solvate of the pharmaceutically acceptable salt thereof.

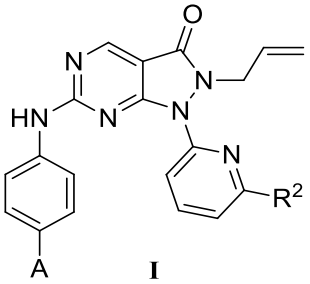
[0004f] In a further aspect, the present disclosure refers to a pharmaceutical composition comprising the combination disclosed herein and a pharmaceutical excipient.

[0004g] In a further aspect, the present disclosure refers to the combination disclosed herein for use in treating and/or preventing cancer.

Content of the present invention

What is claimed is:

1. A pyrazolopyrimidine compound represented by formula **I**, a pharmaceutically acceptable salt thereof, a solvate thereof, or a solvate of the pharmaceutically acceptable salt thereof:



A **I**

wherein, A is C_3-C_{20} cycloalkyl substituted by one R^1;

R^1 is C_3-C_{14} heterocycloalkyl optionally substituted by one, two or three R^{1-8};

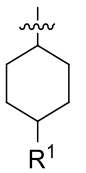
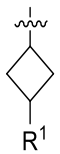
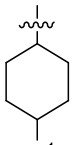
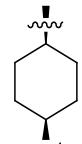
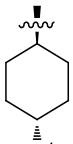
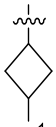
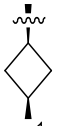
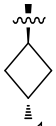
each R^{1-8} is independently halogen, -OH, amino, mercapto, cyano, C_1-C_7 alkyl, C_1-C_7 alkoxy, C_1-C_7 alkylthio, C_2-C_7 alkenyl, C_2-C_7 alkynyl, C_3-C_{14} cycloalkyl, C_3-C_{14} heterocycloalkyl, C_6-C_{10} aryl, C_1-C_7 heteroaryl or "amino substituted by one or two R^{1-8-1}"; each R^{1-8-1} is independently C_1-C_7 alkyl or C_3-C_{14} cycloalkyl;

R^2 is -OR^{2-1}, cyano, carboxyl; or "C_2-C_7 alkyl, C_3-C_{14} cycloalkyl or C_3-C_{14} heterocycloalkyl" optionally substituted by one, two or three R^{2-2};

R^{2-1} is C_1-C_7 alkyl, C_2-C_7 alkenyl, C_2-C_7 alkynyl, C_3-C_{14} cycloalkyl, C_3-C_{14} heterocycloalkyl, or C_6-C_{10} aryl; and

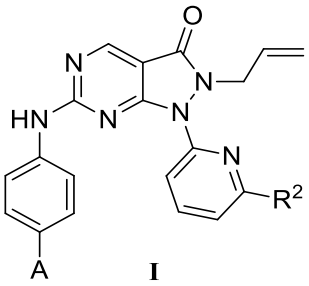
each R^{2-2} is independently halogen, hydroxyl, amino, C_1-C_7 alkyl, C_1-C_7 alkoxy, C_3-C_{14} cycloalkyl or C_3-C_{14} heterocycloalkyl;

in any one of the above cases, the heteroatoms in the C_3-C_{14} heterocycloalkyl, C_1-C_7 heteroaryl are independently selected from one or more of boron, silicon, oxygen, sulfur, selenium, nitrogen and phosphorus; the number of heteroatoms is independently 1, 2, 3 or 4.

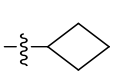
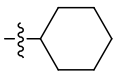
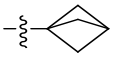
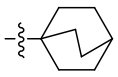
2. The pyrazolopyrimidine compound represented by formula **I** according to claim 1, the pharmaceutically acceptable salt thereof, the solvate thereof, or the solvate of the pharmaceutically acceptable salt thereof, wherein, A is C_3-C_{20} cycloalkyl substituted by one R^1; and the A is  or ,  is  or , and  is  or .

3. The pyrazolopyrimidine compound represented by formula **I** according to claim 1, the pharmaceutically acceptable salt thereof, the solvate thereof, or the solvate of the pharmaceutically acceptable salt thereof, wherein, the pyrazolopyrimidine compound represented by formula **I** is any of the following schemes:

scheme (1):



I

A is , ,  or  substituted by one R^1;

R^1 is C_3-C_{14} heterocycloalkyl optionally substituted by one, two or three R^{1-8};

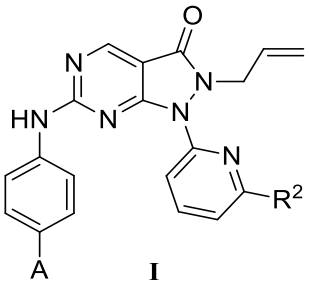
each R^{1-8} is independently halogen, -OH, amino, mercapto, cyano, C_1-C_7 alkyl, C_1-C_7 alkoxy, C_1-C_7 alkylthio, C_3-C_{14} cycloalkyl, C_3-C_{14} heterocycloalkyl, C_6-C_{10} aryl, C_1-C_7 heteroaryl or "amino substituted by one or two R^{1-8-1}"; each R^{1-8-1} is independently C_1-C_7 alkyl or C_3-C_{14} cycloalkyl;

R^2 is "C_2-C_7 alkyl, C_3-C_{14} cycloalkyl or C_3-C_{14} heterocycloalkyl" optionally substituted by one, two or three R^{2-2}; and

each R^{2-2} is independently halogen or hydroxyl;

in any one of the above cases, the heteroatoms in the C_3-C_{14} heterocycloalkyl are selected from one or more of boron, silicon, oxygen, sulfur, selenium, nitrogen and phosphorus; the number of heteroatoms is 1, 2, 3 or 4;

scheme (2):

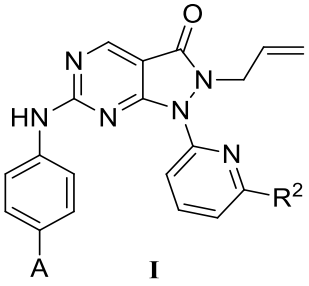


I

A is C_3-C_{20} cycloalkyl substituted by one R^1; and

R^1 is C_3-C_{14} heterocycloalkyl;

scheme (4):



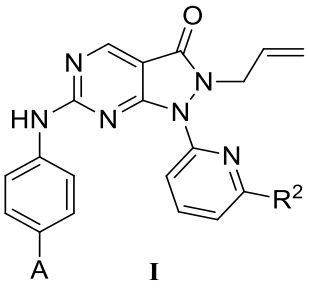
I

A is C_3-C_{20} cycloalkyl substituted by one R^1;

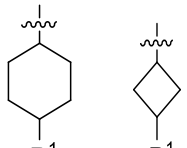
R^1 is C_3-C_{14} heterocycloalkyl; and

R^2 is "C_2-C_7 alkyl or C_3-C_{14} heterocycloalkyl substituted by one R^{2-2}"; R^{2-2} is hydroxyl;

scheme (5):



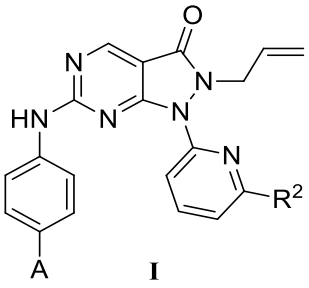
I

A is  ;

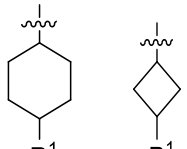
R^1 is C_3-C_{14} heterocycloalkyl; and

R^2 is "C_2-C_7 alkyl or C_3-C_{14} heterocycloalkyl substituted by one R^{2-2}"; R^{2-2} is hydroxyl;

scheme (6):

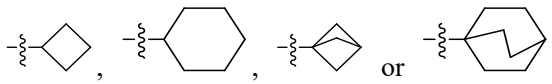


I

A is  ; and

R^1 is C_3-C_{14} heterocycloalkyl;

scheme (7):

A is  substituted by one R^1;

X is CH or N;

R^1 is C_3-C_{14} heterocycloalkyl optionally substituted by one, two or three R^{1-8};

each R^{1-8} is independently oxo, halogen, -OH, amino, mercapto, cyano, C_1-C_7 alkyl, C_1-C_7 alkoxy, C_1-C_7 alkylthio, C_3-C_{14} cycloalkyl, C_3-C_{14} heterocycloalkyl, C_6-C_{10} aryl, C_1-C_7 heteroaryl or "amino substituted by one or two R^{1-8-1}"; each R^{1-8-1} is independently C_1-C_7 alkyl or C_3-C_{14} cycloalkyl;

R^2 is "C_2-C_7 alkyl, C_3-C_{14} cycloalkyl or C_3-C_{14} heterocycloalkyl" optionally substituted by one, two or three R^{2-2}; and

each R^{2-2} is independently halogen or hydroxyl;

in any one of the above cases, the heteroatoms in the C_3-C_{14} heterocycloalkyl, C_1-C_7 heteroaryl are independently selected from one or more of boron, silicon, oxygen, sulfur, selenium, nitrogen and

phosphorus; the number of heteroatoms is independently 1, 2, 3 or 4;

scheme (8):

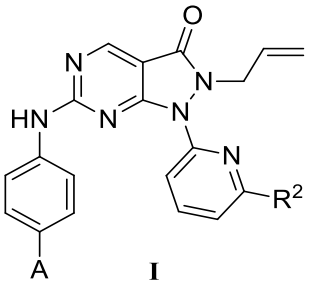
A is C_3-C_{20} cycloalkyl substituted by one or two R^1;

R^1 is C_3-C_{14} heterocycloalkyl optionally substituted by one $R^{1\text{-}8}$;

$R^{1\text{-}8}$ is oxo; and

R^2 is "C_2-C_7 alkyl or C_3-C_{14} heterocycloalkyl substituted by one $R^{2\text{-}2}$"; $R^{2\text{-}2}$ is halogen or hydroxyl;

scheme (9):



I

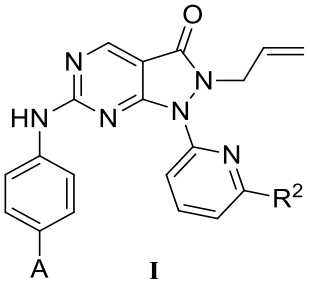
A is C_3-C_{20} cycloalkyl substituted by one R^1;

R^1 is C_3-C_{14} heterocycloalkyl optionally substituted by one $R^{1\text{-}8}$;

$R^{1\text{-}8}$ is oxo; and

R^2 is "C_2-C_7 alkyl or C_3-C_{14} heterocycloalkyl substituted by one $R^{2\text{-}2}$"; $R^{2\text{-}2}$ is hydroxyl;

scheme (10):



I

A is C_3-C_{20} cycloalkyl substituted by one R^1;

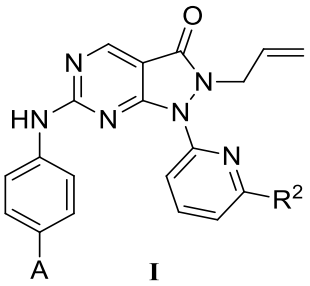
X is CH or N;

R^1 is C_3-C_{14} heterocycloalkyl optionally substituted by one $R^{1\text{-}8}$;

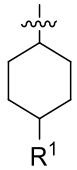
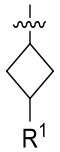
$R^{1\text{-}8}$ is oxo; and

R^2 is "C_2-C_7 alkyl or C_3-C_{14} heterocycloalkyl substituted by one $R^{2\text{-}2}$"; $R^{2\text{-}2}$ is hydroxyl;

scheme (11):



I

A is  or ;

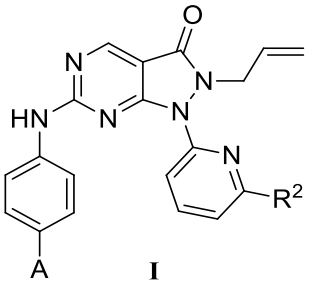
X is CH or N;

R^1 is C_3-C_{14} heterocycloalkyl optionally substituted by one $R^{1\text{-}8}$;

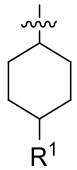
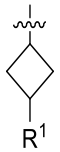
$R^{1\text{-}8}$ is oxo; and

R^2 is "C_2-C_7 alkyl or C_3-C_{14} heterocycloalkyl substituted by one $R^{2\text{-}2}$"; $R^{2\text{-}2}$ is hydroxyl;

scheme (12):



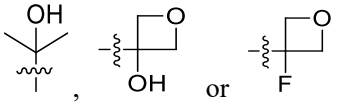
I

A is  or ;

X is CH or N;

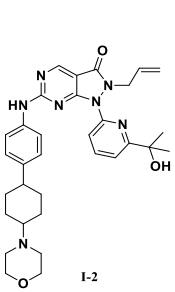
R^1 is C_3-C_{14} heterocycloalkyl optionally substituted by one $R^{1\text{-}8}$;

$R^{1\text{-}8}$ is oxo; and

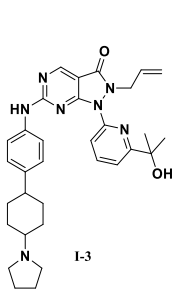
R^2 is .

4. The pyrazolopyrimidine compound represented by formula **I** according to claim 1, the pharmaceutically acceptable salt thereof, the solvate thereof, or the solvate of the pharmaceutically acceptable salt thereof, wherein, the pyrazolopyrimidine compound represented by formula **I** is any of the compounds described in:

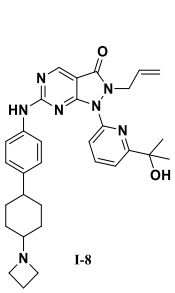
scheme A:



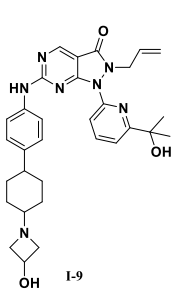
I-2



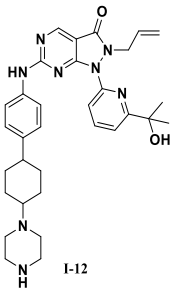
I-3



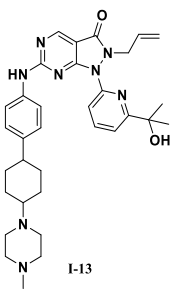
I-8



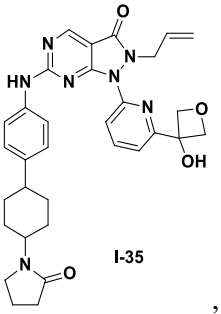
I-9

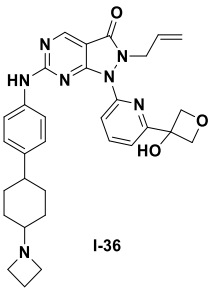


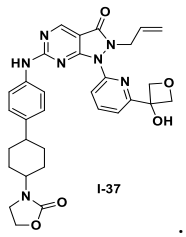
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I-13

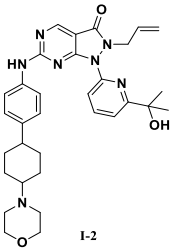

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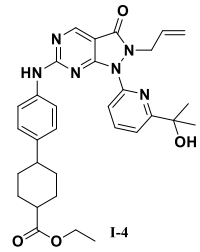
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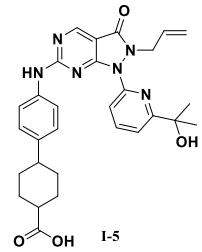
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I-37

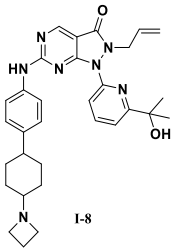
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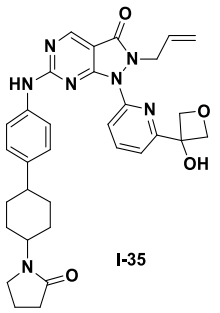
5. The pyrazolopyrimidine compound represented by formula **I** according to claim 1, the pharmaceutically acceptable salt thereof, the solvate thereof, or the solvate of the pharmaceutically acceptable salt thereof, wherein, the pyrazolopyrimidine compound represented by formula **I** is any of the compounds described in scheme B:

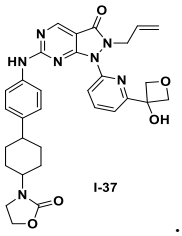

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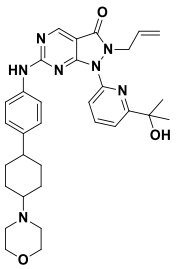
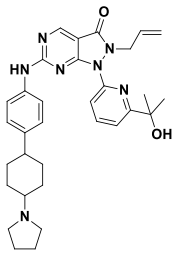
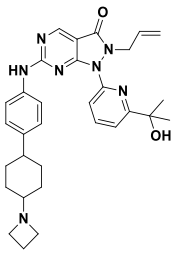
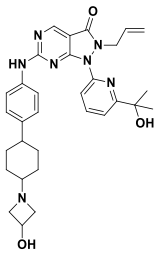
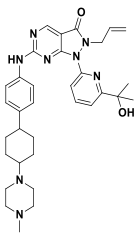
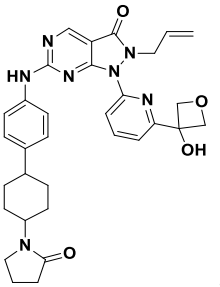
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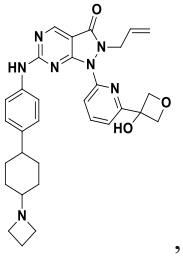
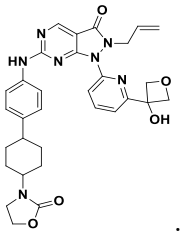
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I-37

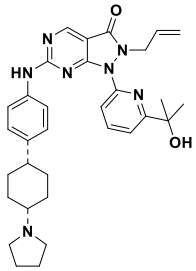
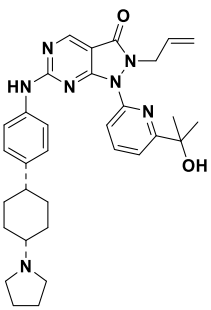
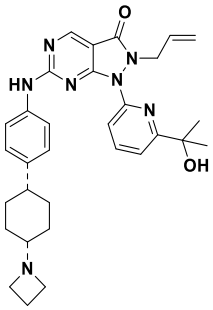
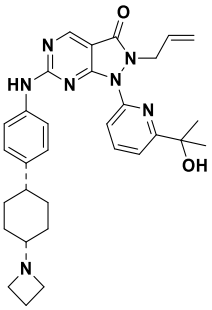
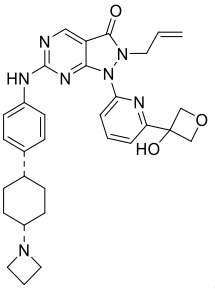
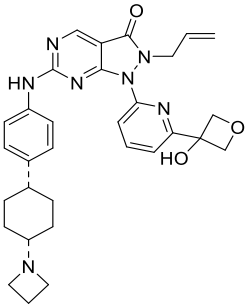
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6. The pyrazolopyrimidine compound represented by formula **I** according to claim 1, the pharmaceutically acceptable salt thereof, the solvate thereof, or the solvate of the pharmaceutically acceptable salt thereof, wherein the pyrazolopyrimidine compound represented by formula **I** is any of the compounds described in scheme C:

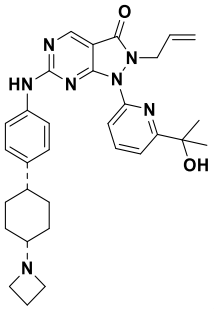

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7. The pyrazolopyrimidine compound represented by formula **I** according to claim 1, the pharmaceutically acceptable salt thereof, the solvate thereof, or the solvate of the pharmaceutically acceptable salt thereof, wherein the pyrazolopyrimidine compound represented by formula **I** is any of the compounds described in scheme D:


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and .

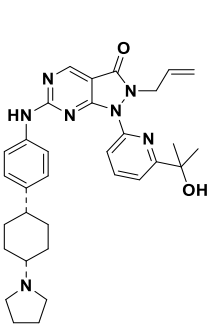
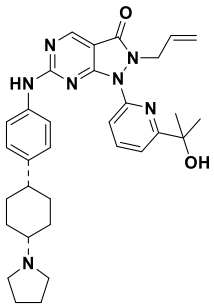
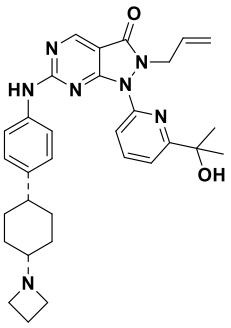
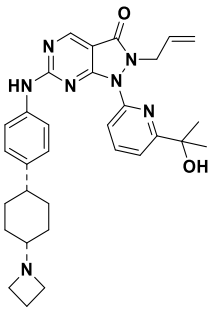
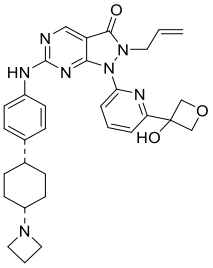
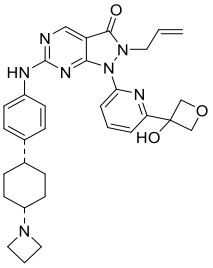
8. The pyrazolopyrimidine compound represented by formula **I** according to claim 1, the pharmaceutically acceptable salt thereof, the solvate thereof, or the solvate of the pharmaceutically acceptable salt thereof, wherein the pyrazolopyrimidine compound represented by formula **I** is any of the compounds described in scheme E:


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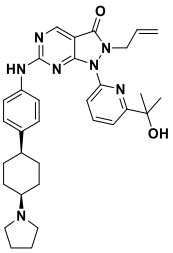
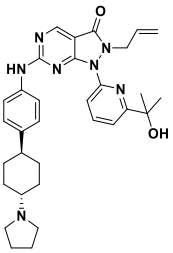
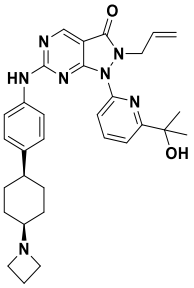
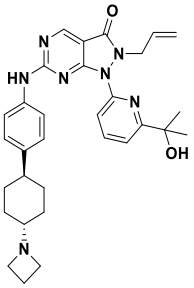
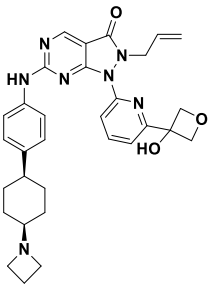
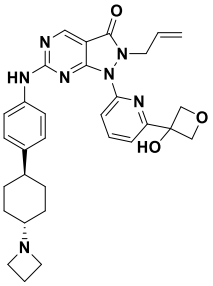
wherein, ⋰ means that the *cis-trans* conformation is uncertain.

9. The pyrazolopyrimidine compound represented by formula **I** according to claim 1, the pharmaceutically acceptable salt thereof, the solvate thereof, or the solvate of the pharmaceutically acceptable salt thereof, wherein the pyrazolopyrimidine compound represented by formula **I** is any of the

compounds described in scheme F:


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10. The pyrazolopyrimidine compound represented by formula **I** according to claim 1, the pharmaceutically acceptable salt thereof, the solvate thereof, or the solvate of the pharmaceutically acceptable salt thereof, wherein the pyrazolopyrimidine compound represented by formula **I** is any of the compounds described in scheme G:


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11. A pharmaceutical composition comprising the pyrazolopyrimidine compound represented by formula **I** according to one of claims 1-10, the pharmaceutically acceptable salt thereof, the solvate thereof, or the solvate of the pharmaceutically acceptable salt thereof.

12. A combination comprising the pyrazolopyrimidine compound represented by formula **I** according to one of claims 1-10, the pharmaceutically acceptable salt thereof, the solvate thereof, or the solvate of the pharmaceutically acceptable salt thereof.

13. Use of the combination according to claim 12 in the preparation of a medicament for preventing

and/or treating cancer.

14. Use of an anticancer drug in the preparation of a medicament for preventing and/or treating cancer, wherein the medicament is to be administered in combination with the pyrazolopyrimidine compound represented by formula **I** according to one of claims 1-10, the pharmaceutically acceptable salt thereof, the solvate thereof, or the solvate of the pharmaceutically acceptable salt thereof.

15. A pharmaceutical composition comprising the combination according to claim 12 and a pharmaceutical excipient.

16. The combination according to claim 12 for use in treating and/or preventing cancer.