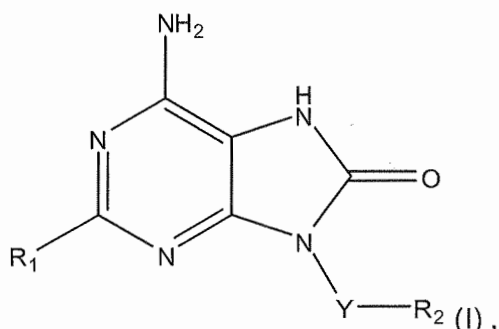




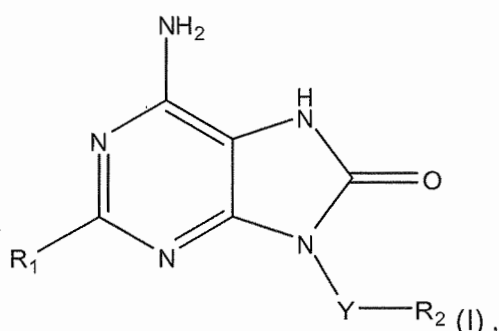
or a pharmaceutically acceptable salt, solvate or polymorph thereof, wherein

Y is (C₁₋₄)alkylene,

R₁ is a heteroaryl¹ and

5 R₂ an aryl² or a heterocyclyl.

In a first aspect, there is provided a compound compound of formula (I)

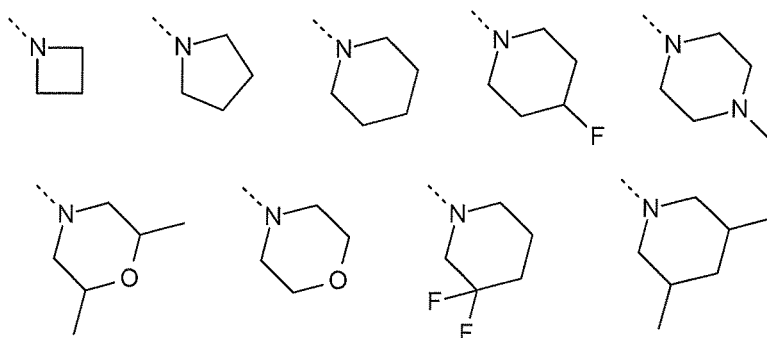


or a pharmaceutically acceptable salt, ~~solvate~~ or polymorph thereof, wherein Y is (C₁₋₄) alkylene,

10 R₁ is selected from the group comprising an imidazolyl, a pyrazolyl, a pyrrolyl, a furyl, an oxadiazolyl, an oxazolyl or a pyrimidinyl each of which is optionally substituted by one or more substituents independently selected from halogen, hydroxyl, C₁₋₆ alkyl, C₁₋₄ alkoxy or C₃₋₆ cycloalkyl and R₂ is an aryl² or a heterocyclyl; wherein

the term "aryl²ⁿ" includes phenyl, naphtyl, anthracenyl and phenanthrenyl, which is optionally substituted by one or more substituents independently selected from hydroxyl, C₁₋₆ alkyl, C₁₋₄

15 alkoxy, trifluoromethyl, CO₂R₃, R₄R₅N-C₁₋₄-alkyl-, halogen, hydroxyl- C₁₋₄ alkyl-, NR₆R₇, C(O)R₆, C(O)NR₆R₇, C₁₋₄alkyl-diethoxyphosphoryl or C₁₋₄alkyl-phosphonic acid, whereby R₃ is selected from H and C₁₋₆ alkyl, R₄ and R₅ taken together with the nitrogen, to which they are both attached, form a heterocycle selected from the group consisting of:



R₆ and R₇ are each independently selected from H, C₁₋₆-alkyl or C₁₋₄alkoxy.

The term "heterocyclyl" refers to tetrahydropyran and heteroaryl².

The term heteroaryl² includes pyridyl, tetrahydroisoquinoliny, imidazopyridinyl, quinoliny, isoquinoliny, pyrazinyl, pyrimidyl, naphthyridinyl, pyridazinyl, benzimidazolyl, benzothiazolyl, pyrazolyl, thiazolyl, imidazolyl, indazolyl. Heteroaryl² is optionally substituted by one or more substituents independently selected from halogen, hydroxyl, C₁₋₆ alkyl, C₁₋₄ alkoxy, oxy-C₁₋₄alkylamine or pyrrolidinyl-methanone.

In a further embodiment the current disclosure encompasses a compound of formula (I) wherein R₁ is selected from the group comprising an imidazolyl, a pyrazolyl or a pyridinyl each of which is optionally substituted by one or more substituents independently selected from halogen, hydroxyl, C₁₋₆ alkyl, C₁₋₄ alkoxy or C₃₋₆ cycloalkyl.

Preferred compounds according to the disclosure are compounds listed in Table 1 and Table 2 respectively under the heading of the following numbers: 1, 4, 9, 23, 24, 25, 26, 35, 36, 48, 49, 50, 51 and 54.

Furthermore, in a second aspect, the disclosure provides a pharmaceutical composition comprising a compound of formula (I) or a pharmaceutically acceptable salt, ~~solvate~~ or polymorph thereof together with one or more pharmaceutically acceptable excipients, diluents or carriers.

In a third aspect, the disclosure provides a compound of formula (I) or a pharmaceutically acceptable salt, ~~solvate~~ or polymorph thereof or a pharmaceutical composition above mentioned for use as a medicament.

In a fourth aspect, the disclosure provides use of a compound of formula (I) or a pharmaceutically acceptable salt, ~~solvate~~ or polymorph thereof or a pharmaceutical composition above

mentioned, in the manufacture of a medicament for use in the treatment of a disorder in which the modulation of TLR7 is involved.

In a ~~fourth~~^{fifth} aspect, the disclosure provides the use of a compound of formula (I) or a pharmaceutically acceptable salt, ~~solvate~~ or polymorph thereof as defined herein in the manufacture of a medicament for the treatment of viral infections.

The term "alkyl" refers to a straight-chain or branched-chain saturated aliphatic hydrocarbon containing the specified number of carbon atoms.

The term "halogen" refers to fluorine, chlorine, bromine or iodine.

The term "cycloalkyl" refers to a carbocyclic ring containing the specified number of carbon atoms.

The term "alkoxy" refers to an alkyl (carbon and hydrogen chain) group singular bonded to oxygen like for instance a methoxy group or ethoxy group.

Pharmaceutically acceptable salts of the compounds of formula (I) include the acid addition and base salts thereof. Suitable acid addition salts are formed from acids which form non-toxic salts. Suitable base salts are formed from bases which form non-toxic salts.

The compounds of the disclosure may also exist in unsolvated and solvated forms. The term "solvate" is used herein to describe a molecular complex comprising the compound of the disclosure and one or more pharmaceutically acceptable solvent molecules, for example, ethanol.

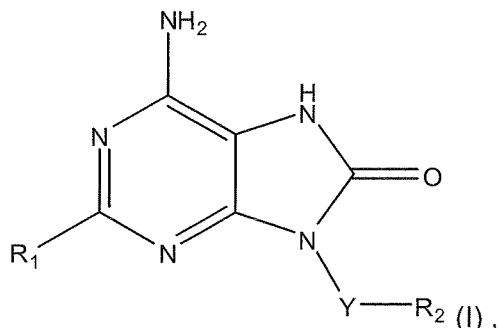
The term "polymorph" refers to the ability of the compound of the disclosure to exist in more than one form or crystal structure.

The compounds of the disclosure can be present in a so-called "tautomer(s)" formation referring to isomers of organic compounds that readily interconvert by a chemical reaction called tautomerization. This reaction results in the formal migration of a hydrogen atom or proton, accompanied by a switch of a single bond and adjacent double bond.

The compounds of the present disclosure may be administered as crystalline or amorphous products. They may be obtained for example as solid plugs, powders, or films by methods such as precipitation, crystallization, freeze drying, spray drying, or evaporative drying. They may be administered alone or in combination with one or more other compounds of the disclosure or in combination with one or more other drugs. Generally, they will be administered as a formulation in association with one or more pharmaceutically acceptable excipients. The term "excipient" is used herein to describe any ingredient other than the compound(s) of the disclosure. The choice of

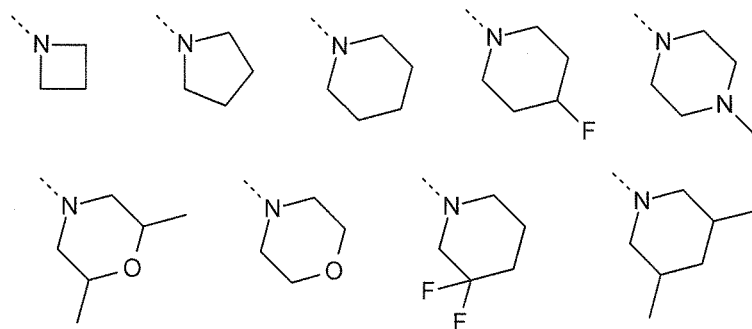
Claims

1. A compound of formula (I)



or a pharmaceutically acceptable salt, solvate or polymorph thereof, wherein Y is (C₁₋₄) alkylene, R₁ is selected from the group comprising an imidazolyl, a pyrazolyl, a pyrrolyl, a pyrazolyl, a furyl, an oxadiazolyl, an oxazolyl or a pyrimidinyl each of which is optionally substituted by one or more substituents independently selected from halogen, hydroxyl, C₁₋₆ alkyl, C₁₋₄ alkoxy or C₃₋₆ cycloalkyl and R₂ is an aryl² or a heterocyclyl; wherein

the term "aryl²" includes phenyl, naphthyl, anthracenyl and phenanthrenyl, which is optionally substituted by one or more substituents independently selected from hydroxyl, C₁₋₆ alkyl, C₁₋₄ alkoxy, trifluoromethyl, CO₂R₃, R₄R₅N-C₁₋₄-alkyl-, halogen, hydroxyl- C₁₋₄ alkyl-, NR₆R₇, C(O)R₆, C(O)NR₆R₇, C₁₋₄alkyl-diethoxyphosphoryl or C₁₋₄alkyl-phosphonic acid, whereby R₃ is selected from H and C₁₋₆ alkyl, R₄ and R₅ taken together with the nitrogen, to which they are both attached, form a heterocycle selected from the group consisting of:



and R₆ and R₇ are each independently selected from H, C₁₋₆-alkyl or C₁₋₄alkoxy; wherein

the term "heterocyclyl" refers to tetrahydropyran and heteroaryl², whereby the term "heteroaryl²" includes pyridyl, tetrahydroisoquinolyl, imidazopyridinyl, quinolyl, isoquinolyl, pyrazinyl, pyrimidyl, naphthyridinyl, pyridazinyl, benzimidazolyl, benzothiazolyl, pyrazolyl, thiazolyl, imidazolyl, indazolyl, which is optionally substituted by one or more substituents independently selected from halogen, hydroxyl, C₁₋₆ alkyl, C₁₋₄ alkoxy, oxy-C₁₋₄alkylamine or pyrrolidinyl-methanone; and wherein

the term "solvate" refers to a molecular complex comprising the compound of formula (I) and one or more pharmaceutically acceptable solvent mol.

2. A pharmaceutical composition comprising a compound of formula (I) or a pharmaceutically acceptable salt, ~~solvate~~ or polymorph thereof according to claim 1 together with one or more pharmaceutically acceptable excipients, diluents or carriers.

3. A compound of formula (I) or a pharmaceutically acceptable salt, ~~solvate~~ or polymorph thereof according to claim 1, or a pharmaceutical composition according to claim 2 for use as a medicament.

4. ~~A Use of a~~ compound of formula (I) or a pharmaceutically acceptable salt, ~~solvate~~ or polymorph thereof according to claim 1, or a pharmaceutical composition according to claim 2, in the manufacture of a medicament ~~for use in the treatment of a disorder in which the modulation of TLR7 is involved.~~

5. Use of a compound of formula (I) or a pharmaceutically acceptable salt, ~~solvate~~ or polymorph thereof according to claim 1 in the manufacture of a medicament for the treatment of viral infections.