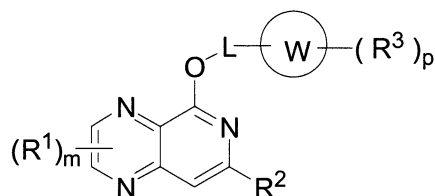


WHAT IS CLAIMED IS:

1. ~~At least one~~ A compound of formula (I):



(I)

and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein

R¹ is independently chosen from hydrogen, halo, -CN, -OH, optionally substituted C₁-C₆alkyl, optionally substituted C₁-C₆alkoxy, -NH₂, -NH(C₁-C₄alkyl), and -N(C₁-C₄alkyl)(C₁-C₄alkyl);

R² is aryl, or heteroaryl, each of which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, -S(O)_nNR⁵R⁶, optionally substituted lower alkyl, optionally substituted cycloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, optionally substituted aryl, optionally substituted alkenyl, and optionally substituted alkynyl;

L is a bond, or optionally substituted C₁-C₆alkylene;

W is cycloalkyl, heterocycle, aryl, or heteroaryl;

R³ is independently selected from hydrogen, -Lx-halo, -Lx-R⁴, -Lx-NR⁵R⁶, -Lx-OR⁷, -Lx-S(O)_nR⁸, -Lx-C(O)R⁹, -S(O)_n-Lx-R⁸, -C(O)-Lx-R⁹, -Lx-CN, -Lx-NR⁵C(O)R⁹, -Lx-NR⁵S(O)_nR⁸, -Lx-NR⁵C(O)NR¹⁰R¹¹, -Lx-NR⁵S(O)_nNR¹⁰R¹¹, -Lx-NR⁵C(O)OR⁷, -Lx-NR⁵S(O)_nOR⁷, -NO₂, -Lx-C(O)NR⁵R⁶, -Lx-S(O)_nNR⁵R⁶, oxo(=O), optionally substituted cycloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, and optionally substituted aryl,

provided when L is methylene and W is 5- or 6- membered heterocycle, R³ is independently selected from -Lx-NR⁵R⁶, -Lx-OR⁷, -Lx-S(O)_nR⁸, -Lx-C(O)R⁹, -S(O)_n-Lx-R⁸, -C(O)-Lx-R⁹, -Lx-CN, -Lx-NR⁵C(O)R⁹, -Lx-NR⁵S(O)_nR⁸, -Lx-NR⁵C(O)NR¹⁰R¹¹,

-Lx-NR⁵S(O)_nNR¹⁰R¹¹, -Lx-NR⁵C(O)OR⁷, -Lx-NR⁵S(O)_nOR⁷, -NO₂, -Lx-C(O)NR⁵R⁶, -Lx-S(O)_nNR⁵R⁶, oxo(=O), optionally substituted cycloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, and optionally substituted aryl;

R⁴ is C₁-C₆alkyl, C₂-C₆alkenyl, or C₂-C₆alkynyl, each of which is optionally substituted;

R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, and R¹¹ are independently selected from hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, and heterocycle, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄alkyl), -CN, C₁-C₄alkyl, -NH₂, -NH(C₁-C₄alkyl), -N(C₁-C₄alkyl)(C₁-C₄alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄alkyl), -C(O)N(C₁-C₄alkyl)(C₁-C₄alkyl), -C(O)(C₁-C₄alkyl), -NHC(O)(C₁-C₄alkyl), -N(C₁-C₄alkyl)C(O)(C₁-C₄alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄alkyl), -S(O)_nN(C₁-C₄alkyl)(C₁-C₄alkyl), -S(O)_n(C₁-C₄alkyl), -NHS(O)_n(C₁-C₄alkyl), -N(C₁-C₄alkyl)S(O)_n(C₁-C₄alkyl), optionally substituted C₃-C₈cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄alkyl is optionally substituted by halo, -OH, -OMe, -CN;

or R⁵ and R⁶, R⁵ and R⁷, R⁵ and R⁸, R⁵ and R⁹, and R⁵ and R¹⁰ together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄alkyl), -CN, C₁-C₄alkyl, -NH₂, -NH(C₁-C₄alkyl), -N(C₁-C₄alkyl)(C₁-C₄alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄alkyl), -C(O)N(C₁-C₄alkyl)(C₁-C₄alkyl), -C(O)(C₁-C₄alkyl), -NHC(O)(C₁-C₄alkyl), -N(C₁-C₄alkyl)C(O)(C₁-C₄alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄alkyl), -S(O)_nN(C₁-C₄alkyl)(C₁-C₄alkyl), -S(O)_n(C₁-C₄alkyl), -NHS(O)_n(C₁-C₄alkyl), -N(C₁-C₄alkyl)S(O)_n(C₁-C₄alkyl), optionally substituted C₃-C₈cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄alkyl is optionally substituted by halo, -OH, -OMe, or -CN;

Lx is a bond, or optionally substituted C₁-C₆alkylene;

m is 0, 1 or 2,

n is 1 or 2,

p is 1, 2 or 3.

2. ~~At least one~~The compound of claim 1, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R¹ is independently

chosen from hydrogen, halo, -CN, -OH, optionally substituted C₁-C₆ alkyl, optionally substituted C₁-C₆ alkoxy, -NH₂, -NH(C₁-C₄ alkyl), and -N(C₁-C₄ alkyl)(C₁-C₄ alkyl).

3. ~~At least one~~The compound of claim 2, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R¹ is independently chosen from hydrogen, halo, -CN, -OH; or is chosen from methyl, ethyl, *n*-propyl, *i*-propyl, -NH₂, *N*-methylamino, *N,N*-dimethylamino, *N*-ethylamino, *N-n*-propylamino, *N-i*-propylamino, methoxy, ethoxy, propoxy, isopropoxy, each of which is optionally substituted.

4. ~~At least one~~The compound of any one of claim 3, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R¹ is hydrogen.

5. ~~At least one~~The compound of any one of claims 1 to 4, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein m is 1.

6. ~~At least one~~The compound of any one of claims 1 to 5, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R² is C₅-C₁₀aryl, or 5-10 membered heteroaryl, each of which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, -S(O)_nNR⁵R⁶, optionally substituted C₁-C₆ alkyl, optionally substituted C₃-C₈ cycloalkyl, optionally substituted 3-8 membered heterocycle, optionally substituted 5-10 membered heteroaryl, optionally substituted C₅-C₁₀ aryl, optionally substituted C₂-C₆ alkenyl, and optionally substituted C₂-C₆ alkynyl,

R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, and R¹¹ are independently selected from hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, and heterocycle, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄alkyl), -CN, C₁-C₄alkyl, -NH₂, -NH(C₁-C₄alkyl), -N(C₁-C₄alkyl)(C₁-C₄alkyl), -

C(O)NH₂, -C(O)NH(C₁-C₄alkyl), -C(O)N(C₁-C₄alkyl)(C₁-C₄alkyl), -C(O)(C₁-C₄alkyl), -NHC(O)(C₁-C₄alkyl), -N(C₁-C₄alkyl)C(O)(C₁-C₄alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄alkyl), -S(O)_nN(C₁-C₄alkyl)(C₁-C₄alkyl), -S(O)_n(C₁-C₄alkyl), -NHS(O)_n(C₁-C₄alkyl), -N(C₁-C₄alkyl)S(O)_n(C₁-C₄alkyl), optionally substituted C₃-C₈cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄alkyl is optionally substituted by halo, -OH, -OMe, -CN;

or R⁵ and R⁶, R⁵ and R⁷, R⁵ and R⁸, R⁵ and R⁹, and R⁵ and R¹⁰ together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄alkyl), -CN, C₁-C₄alkyl, -NH₂, -NH(C₁-C₄alkyl), -N(C₁-C₄alkyl)(C₁-C₄alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄alkyl), -C(O)N(C₁-C₄alkyl)(C₁-C₄alkyl), -C(O)(C₁-C₄alkyl), -NHC(O)(C₁-C₄alkyl), -N(C₁-C₄alkyl)C(O)(C₁-C₄alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄alkyl), -S(O)_nN(C₁-C₄alkyl)(C₁-C₄alkyl), -S(O)_n(C₁-C₄alkyl), -NHS(O)_n(C₁-C₄alkyl), -N(C₁-C₄alkyl)S(O)_n(C₁-C₄alkyl), optionally substituted C₃-C₈cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄alkyl is optionally substituted by halo, -OH, -OMe, or -CN.

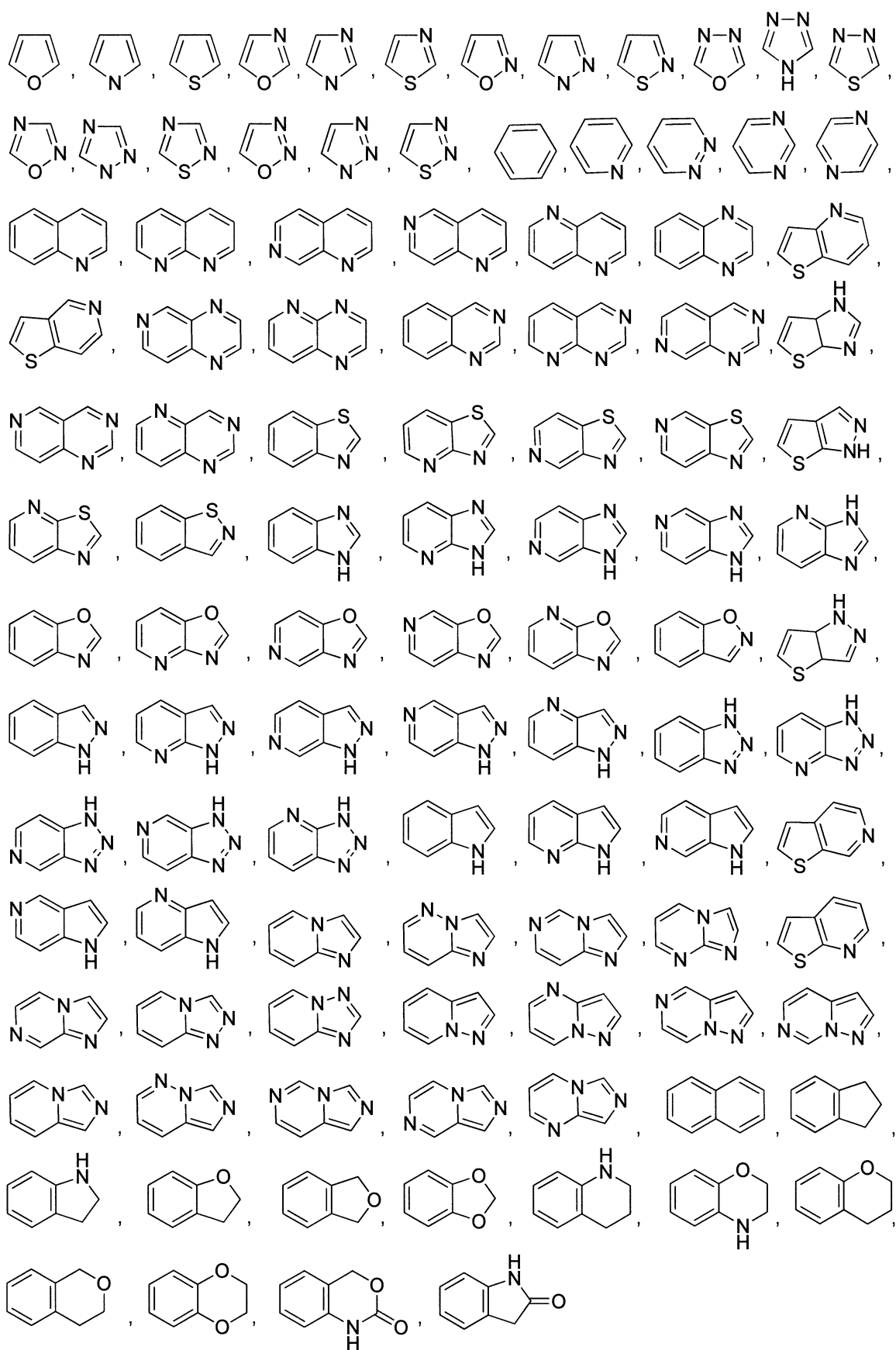
7. ~~At least one~~ The compound of any one of claim 6, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R² is independently chosen from phenyl, naphthyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, quinolinyl, and , indanyl, indolinyl, indolin-2-one, 2,3-dihydrobenzofuryl, benzo[d][1,3]dioxolyl, and 1,2,3,4-tetrahydroquinolinyl, chroman, 2,3-dihydrobenzo[b][1,4]dioxinyl, 3,4-dihydro-2H-benzo[b][1,4]oxazinyl, isochroman, 1,3-dihydroisobenzofuryl, 1H-benzo[d][1,3]oxazin-2(4H)-onyl, each of which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, and -S(O)_nNR⁵R⁶; or selected from methyl, ethyl, *n*-propyl, *i*-propyl, *n*-butyl, *i*-butyl, and *t*-butyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, pyrrolidinyl, tetrahydrofuryl, tetrahydropyranyl, piperidinyl, piperazinyl, morpholinyl, homomorpholinyl, thiomorpholinyl, diazepanyl, oxazepanyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl,

isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, quinolyl, phenyl, and naphthyl, each of which is optionally substituted by one or more groups selected from halo, $-NR^5R^6$, $-OR^7$, $-S(O)_nR^8$, $-C(O)R^9$, $-C(O)OR^7$, $-CN$, $-C(O)NR^5R^6$, $-NR^5C(O)R^9$, $-NR^5S(O)_nR^8$, $-NR^5S(O)_nNR^{10}R^{11}$, $-NR^5C(O)OR^7$, $-NR^5C(O)NR^{10}R^{11}$, $-NO_2$, $-S(O)_nNR^5R^6$, optionally substituted lower alkyl, optionally substituted cycloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, optionally substituted aryl, optionally substituted alkenyl, and optionally substituted alkynyl,

R^5 , R^6 , R^7 , R^8 , R^9 , R^{10} , and R^{11} are independently selected from hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, and heterocycle, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, $-OH$, $-O(C_1-C_4alkyl)$, $-CN$, C_1-C_4alkyl , $-NH_2$, $-NH(C_1-C_4alkyl)$, $-N(C_1-C_4alkyl)(C_1-C_4alkyl)$, $-C(O)NH_2$, $-C(O)NH(C_1-C_4alkyl)$, $-C(O)N(C_1-C_4alkyl)(C_1-C_4alkyl)$, $-C(O)(C_1-C_4alkyl)$, $-NHC(O)(C_1-C_4alkyl)$, $-N(C_1-C_4alkyl)C(O)(C_1-C_4alkyl)$, $-S(O)_nNH_2$, $-S(O)_nNH(C_1-C_4alkyl)$, $-S(O)_nN(C_1-C_4alkyl)(C_1-C_4alkyl)$, $-S(O)_n(C_1-C_4alkyl)$, $-NHS(O)_n(C_1-C_4alkyl)$, $-N(C_1-C_4alkyl)S(O)_n(C_1-C_4alkyl)$, optionally substituted C_3-C_8 cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C_1-C_4alkyl is optionally substituted by halo, $-OH$, $-OMe$, $-CN$;

or R^5 and R^6 , R^5 and R^7 , R^5 and R^8 , R^5 and R^9 , and R^5 and R^{10} together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, $-OH$, $-O(C_1-C_4alkyl)$, $-CN$, C_1-C_4alkyl , $-NH_2$, $-NH(C_1-C_4alkyl)$, $-N(C_1-C_4alkyl)(C_1-C_4alkyl)$, $-C(O)NH_2$, $-C(O)NH(C_1-C_4alkyl)$, $-C(O)N(C_1-C_4alkyl)(C_1-C_4alkyl)$, $-C(O)(C_1-C_4alkyl)$, $-NHC(O)(C_1-C_4alkyl)$, $-N(C_1-C_4alkyl)C(O)(C_1-C_4alkyl)$, $-S(O)_nNH_2$, $-S(O)_nNH(C_1-C_4alkyl)$, $-S(O)_nN(C_1-C_4alkyl)(C_1-C_4alkyl)$, $-S(O)_n(C_1-C_4alkyl)$, $-NHS(O)_n(C_1-C_4alkyl)$, $-N(C_1-C_4alkyl)S(O)_n(C_1-C_4alkyl)$, optionally substituted C_3-C_8 cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C_1-C_4alkyl is optionally substituted by halo, $-OH$, $-OMe$, or $-CN$.

8. ~~At least one~~The compound of any one of claim 7, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R^2 is independently chosen from



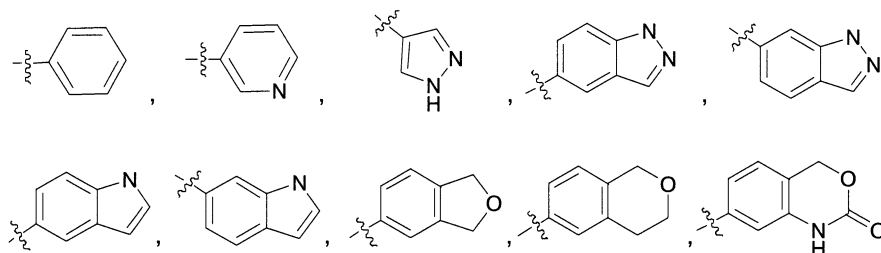
each of which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, and -S(O)_nNR⁵R⁶; or selected from methyl, ethyl, *n*-propyl, *i*-propyl, *n*-butyl, *i*-butyl, and *t*-butyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, pyrrolidinyl, tetrahydrofuryl, tetrahydropyranyl, piperidinyl, piperazinyl, morpholinyl, homomorpholinyl, thiomorpholinyl, diazepanyl, oxazepanyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, quinolinyl, phenyl, and naphthyl, each of which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, -S(O)_nNR⁵R⁶, optionally substituted lower alkyl, optionally substituted cycloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, optionally substituted aryl, optionally substituted alkenyl, and optionally substituted alkynyl,

R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, and R¹¹ are independently selected from hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, and heterocycle, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN,

or R⁵ and R⁶, R⁵ and R⁷, R⁵ and R⁸, R⁵ and R⁹, and R⁵ and R¹⁰ together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl),

optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyls optionally substituted by halo, -OH, -OMe, or -CN.

9 ~~At least one~~ The compound of any one of claim 8, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R² is independently chosen from



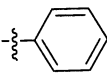
each of which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, and -S(O)_nNR⁵R⁶; or selected from methyl, ethyl, *n*-propyl, *i*-propyl, *n*-butyl, *i*-butyl, and *t*-butyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, pyrrolidinyl, tetrahydrofuryl, tetrahydropyranyl, piperidinyl, piperazinyl, morpholinyl, homomorpholinyl, thiomorpholinyl, diazepanyl, oxazepanyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, quinolyl, phenyl, and naphthyl, each of which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, -S(O)_nNR⁵R⁶, optionally substituted lower alkyl, optionally substituted cycloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, optionally substituted aryl, optionally substituted alkenyl, and optionally substituted alkynyl,

R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, and R¹¹ are independently selected from hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, and heterocycle, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄

alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN,

or R⁵ and R⁶, R⁵ and R⁷, R⁵ and R⁸, R⁵ and R⁹, and R⁵ and R¹⁰ together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN.

10. ~~At least one~~ The compound of any one of claim 9, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at

least one pharmaceutically acceptable salt, or solvate thereof, wherein R² is ,

which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, and -S(O)_nNR⁵R⁶; or selected from methyl, ethyl, *n*-propyl, *i*-propyl, *n*-butyl, *i*-butyl, and *t*-butyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, pyrrolidinyl, tetrahydrofuryl, tetrahydropyran, piperidinyl, piperazinyl, morpholinyl, homomorpholinyl, thiomorpholinyl, diazepanyl, oxazepanyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, quinolinyl, phenyl, and naphthyl, each of which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, -S(O)_nNR⁵R⁶, optionally substituted lower alkyl, optionally substituted cycloalkyl, optionally substituted heterocycle, optionally substituted

heteroaryl, optionally substituted aryl, optionally substituted alkenyl, and optionally substituted alkynyl,

R^5 , R^6 , R^7 , R^8 , R^9 , R^{10} , and R^{11} are independently selected from hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, and heterocycle, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN,

or R^5 and R^6 , R^5 and R^7 , R^5 and R^8 , R^5 and R^9 , and R^5 and R^{10} together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN.

11. ~~At least one~~ The compound of any one of claims 1 to 10, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein L is a bond, or optionally substituted C₁-C₆ alkylene.

12. ~~At least one~~ The compound of any one of claim 11, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein L is a bond, or -CH₂-, or -CH₂-CH₂-.

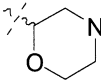
13. ~~At least one~~ The compound of any one of claims 1 to 12, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein W is C₃-C₈ cycloalkyl, 3-8 membered heterocycle, C₅-C₁₀ aryl, or 5-10 membered heteroaryl.

14. ~~At least one~~ The compound of any one of claim 13, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein W is cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, pyrrolidinyl, tetrahydrofuryl, tetrahydropyranyl, piperidinyl, piperazinyl, morpholinyl, homomorpholinyl, thiomorpholinyl, phenyl, naphthyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, or quinolinyl.

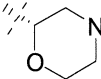
15. ~~At least one~~ The compound of any one of claim 14, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein W is cyclohexyl, tetrahydrofuryl, tetrahydropyranyl, piperidinyl, morpholinyl, phenyl, or pyrazolyl.

16. ~~At least one~~ The compound of any one of claim 15, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein W is tetrahydrofuryl, tetrahydropyranyl, or morpholinyl.

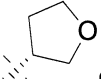
17. ~~At least one~~ The compound of any one of claim 16, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at

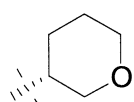
least one pharmaceutically acceptable salt, or solvate thereof, wherein W is .

18. ~~At least one~~ The compound of any one of claim 16, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at

least one pharmaceutically acceptable salt, or solvate thereof, wherein W is , which is substituted by R³ on nitrogen atom.

19. ~~At least one~~ The compound of any one of claim 16, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at

least one pharmaceutically acceptable salt, or solvate thereof, wherein W is  or



20. ~~At least one~~ The compound of any one of claims 1 to 19, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R³ is independently selected from hydrogen, -Lx-halo, -Lx-R⁴, -Lx-NR⁵R⁶, -Lx-OR⁷, -Lx-S(O)_nR⁸, -Lx-C(O)R⁹, -S(O)_n-Lx-R⁸, -C(O)-Lx-R⁹, -Lx-CN, -Lx-NR⁵C(O)R⁹, -Lx-NR⁵S(O)_nR⁸, -Lx-NR⁵C(O)NR¹⁰R¹¹, -Lx-NR⁵S(O)_nNR¹⁰R¹¹, -Lx-NR⁵C(O)OR⁷, -Lx-NR⁵S(O)_nOR⁷, -NO₂, -Lx-C(O)NR⁵R⁶, -Lx-S(O)_nNR⁵R⁶, oxo(=O), optionally substituted C₃-C₈cycloalkyl, optionally substituted 3-8 membered heterocycle, optionally substituted C₅-C₁₀aryl, and optionally substituted 5-10 membered heteroaryl, provided when L is methylene and W is 5- or 6- membered heterocycle, R³ is independently selected from -Lx-NR⁵R⁶, -Lx-OR⁷, -Lx-S(O)_nR⁸, -Lx-C(O)R⁹, -S(O)_n-Lx-R⁸, -C(O)-Lx-R⁹, -Lx-CN, -Lx-NR⁵C(O)R⁹, -Lx-NR⁵S(O)_nR⁸, -Lx-NR⁵C(O)NR¹⁰R¹¹, -Lx-NR⁵S(O)_nNR¹⁰R¹¹, -Lx-NR⁵C(O)OR⁷, -Lx-NR⁵S(O)_nOR⁷, -NO₂, -Lx-C(O)NR⁵R⁶, -Lx-S(O)_nNR⁵R⁶, oxo(=O), optionally substituted C₃-C₈cycloalkyl, optionally substituted 3-8 membered heterocycle, optionally substituted C₅-C₁₀aryl, and optionally substituted 5-10 membered heteroaryl

R⁴ is optionally substituted C₁-C₄alkyl,

R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, and R¹¹ are independently selected from hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, and heterocycle, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN,

or R⁵ and R⁶, R⁵ and R⁷, R⁵ and R⁸, R⁵ and R⁹, and R⁵ and R¹⁰ together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl),

alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN;

Lx is a bond, or optionally substituted C₁-C₆ alkylene.

21. ~~At least one~~ The compound of any one of claim 20, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R³ is independently selected from hydrogen, -Lx-halo, -Lx-R⁴, -Lx-NR⁵R⁶, -Lx-OR⁷, -Lx-S(O)_nR⁸, -Lx-C(O)R⁹, -S(O)_n-Lx-R⁸, -C(O)-Lx-R⁹, -Lx-CN, -Lx-NR⁵C(O)R⁹, -Lx-NR⁵S(O)_nR⁸, -Lx-NR⁵C(O)NR¹⁰R¹¹, -Lx-NR⁵S(O)_nNR¹⁰R¹¹, -Lx-NR⁵C(O)OR⁷, -Lx-NR⁵S(O)_nOR⁷, -NO₂, -Lx-C(O)NR⁵R⁶, -Lx-S(O)_nNR⁵R⁶, oxo(=O), or selected from cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, pyrrolidiny, tetrahydrofuryl, tetrahydropyrany, piperidiny, piperazinyl, morpholinyl, homomorpholinyl, thiomorpholinyl, diazepanyl, oxazepanyl, phenyl, naphthyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolinyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolinyl, indolyl, indazolyl, and quinolinyl, each of which is optionally substituted, provided when L is methylene and W is 5- or 6- membered heterocycle, R³ is independently selected from -Lx-NR⁵R⁶, -Lx-OR⁷, -Lx-S(O)_nR⁸, -Lx-C(O)R⁹, -S(O)_n-Lx-R⁸, -C(O)-Lx-R⁹, -Lx-CN, -Lx-NR⁵C(O)R⁹, -Lx-NR⁵S(O)_nR⁸, -Lx-NR⁵C(O)NR¹⁰R¹¹, -Lx-NR⁵S(O)_nNR¹⁰R¹¹, -Lx-NR⁵C(O)OR⁷, -Lx-NR⁵S(O)_nOR⁷, -NO₂, -Lx-C(O)NR⁵R⁶, -Lx-S(O)_nNR⁵R⁶, oxo(=O),

R⁴ is methyl, ethyl, *n*-propyl, *i*-propyl, *n*-butyl, *i*-butyl, and *t*-butyl, each of which is optionally substituted

R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, and R¹¹ are independently selected from hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, and heterocycle, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈

cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkylis optionally substituted by halo, -OH, -OMe, or -CN,

or R⁵ and R⁶, R⁵ and R⁷, R⁵ and R⁸, R⁵ and R⁹, and R⁵ and R¹⁰ together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkylis optionally substituted by halo, -OH, -OMe, or -CN;

Lx is a bond, or optionally substituted C₁-C₄alkylene.

22. ~~At least one~~ The compound of any one of claim 21, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R³ is independently selected from hydrogen, -Lx-OR⁷, -Lx-S(O)_nR⁸, -Lx-C(O)R⁹, -S(O)_n-Lx-R⁸, -C(O)-Lx-R⁹, -Lx-NR⁵C(O)R⁹, -Lx-NR⁵S(O)_nR⁸, -Lx-NR⁵C(O)NR¹⁰R¹¹, -Lx-NR⁵S(O)_nNR¹⁰R¹¹, -Lx-C(O)NR⁵R⁶, -Lx-S(O)_nNR⁵R⁶, and oxo(=O);

R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, and R¹¹ are independently selected from hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, and heterocycle, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkylis optionally substituted by halo, -OH, -OMe, or -CN,

or R⁵ and R⁶, R⁵ and R⁷, R⁵ and R⁸, R⁵ and R⁹, and R⁵ and R¹⁰ together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄

alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN;

Lx is a bond, or optionally substituted C₁-C₄ alkylene.

23. ~~At least one~~ The compound of any one of claims 1 to 22, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, and R¹¹ are independently selected from hydrogen, C₁-C₄ alkyl, C₃-C₈ cycloalkyl, C₅-C₁₀ aryl, 5-10 membered heteroaryl, and 3-8 membered heterocycle, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN.

24. ~~At least one~~ The compound of any one of claim 23, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, and R¹¹ are independently selected from hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, *n*-butyl, *i*-butyl, and *t*-butyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, phenyl, naphthyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, quinolyl, pyrrolidinyl, tetrahydrofuryl, tetrahydropyranyl, piperidinyl, piperazinyl, morpholinyl, homomorpholinyl, thiomorpholinyl, diazepanyl, and oxazepanyl, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄

alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN.

25. ~~At least one~~ The compound of any one of claims 1 to 22, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R⁵ and R⁶, R⁵ and R⁷, R⁵ and R⁸, R⁵ and R⁹, and R⁵ and R¹⁰ together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN.

26. ~~At least one~~ The compound of any one of claim 25, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein Lx is a bond, or optionally substituted C₁-C₄ alkylene.

27. ~~At least one~~ The compound of any one of claims 1 to 26, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein p is 1 or 2.

28. ~~At least one~~ The compound of formula (I) according to claim 1, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein

R¹ is independently chosen from hydrogen, halo, -CN, -OH; or is chosen from methyl, ethyl, *n*-propyl, *i*-propyl, -NH₂, *N*-methylamino, *N,N*-dimethylamino, *N*-ethylamino, *N-n*-propylamino, *N-i*-propylamino, methoxy, ethoxy, propoxy, isopropoxy, each of which is optionally substituted,

R² is independently chosen from phenyl, naphthyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl,

quinolinyl, and , indanyl, indolinyl, indolin-2-one, 2,3-dihydrobenzofuryl, benzo[d][1,3]dioxolyl, and 1,2,3,4-tetrahydroquinolinyl, chroman, 2,3-dihydrobenzo[b][1,4]dioxinyl, 3,4-dihydro-2*H*-benzo[b][1,4]oxazinyl, isochroman, 1,3-dihydroisobenzofuryl, 1*H*-benzo[d][1,3]oxazin-2(4*H*)-onyl, each of which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, and -S(O)_nNR⁵R⁶; or selected from methyl, ethyl, *n*-propyl, *i*-propyl, *n*-butyl, *i*-butyl, and *t*-butyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, pyrrolidinyl, tetrahydrofuryl, tetrahydropyranyl, piperidinyl, piperazinyl, morpholinyl, homomorpholinyl, thiomorpholinyl, diazepanyl, oxazepanyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, quinolinyl, phenyl, and naphthyl, each of which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, -S(O)_nNR⁵R⁶, optionally substituted lower alkyl, optionally substituted cycloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, optionally substituted aryl, optionally substituted alkenyl, and optionally substituted alkynyl,

L is a bond, or optionally substituted C₁-C₆ alkylene,

W is cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, pyrrolidinyl, tetrahydrofuryl, tetrahydropyranyl, piperidinyl, piperazinyl, morpholinyl, homomorpholinyl, thiomorpholinyl, phenyl, naphthyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, or quinolinyl,

R³ is independently selected from hydrogen, -Lx-halo, -Lx-R⁴, -Lx-NR⁵R⁶, -Lx-OR⁷, -Lx-S(O)_nR⁸, -Lx-C(O)R⁹, -S(O)_n-Lx-R⁸, -C(O)-Lx-R⁹, -Lx-CN, -Lx-NR⁵C(O)R⁹, -Lx-NR⁵S(O)_nR⁸, -Lx-NR⁵C(O)NR¹⁰R¹¹, -Lx-NR⁵S(O)_nNR¹⁰R¹¹, -Lx-NR⁵C(O)OR⁷, -Lx-NR⁵S(O)_nOR⁷, -NO₂, -Lx-C(O)NR⁵R⁶, -Lx-S(O)_nNR⁵R⁶, and oxo(=O), provided when L is methylene and W is 5- or 6- membered heterocycle, R³ is independently selected from -Lx-NR⁵R⁶, -Lx-OR⁷, -Lx-S(O)_nR⁸, -Lx-C(O)R⁹, -S(O)_n-Lx-R⁸, -C(O)-Lx-

R^9 , -Lx-CN, -Lx-NR⁵C(O)R⁹, -Lx-NR⁵S(O)_nR⁸, -Lx-NR⁵C(O)NR¹⁰R¹¹, -Lx-NR⁵S(O)_nNR¹⁰R¹¹, -Lx-NR⁵C(O)OR⁷, -Lx-NR⁵S(O)_nOR⁷, -NO₂, -Lx-C(O)NR⁵R⁶, -Lx-S(O)_nNR⁵R⁶, oxo(=O),

R⁴ is methyl, ethyl, *n*-propyl, *i*-propyl, *n*-butyl, *i*-butyl, and *t*-butyl, each of which is optionally substituted,

R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, and R¹¹ are independently selected from hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, *n*-butyl, *i*-butyl, and *t*-butyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, phenyl, naphthyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, quinolyl, pyrrolidinyl, tetrahydrofuryl, tetrahydropyranyl, piperidinyl, piperazinyl, morpholinyl, homomorpholinyl, thiomorpholinyl, diazepanyl, and oxazepanyl, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN,

or R⁵ and R⁶, R⁵ and R⁷, R⁵ and R⁸, R⁵ and R⁹, and R⁵ and R¹⁰ together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN,

Lx is a bond, or optionally substituted C₁-C₄ alkylene,

m is 0, 1 or 2,

n is 1 or 2,

p is 1, 2 or 3.

29. ~~At least one~~ The compound of any one of claims 1 to 28, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein the optionally substituted lower alkyl is chosen from ~~from~~ $-\text{CF}_3$, $-\text{CF}_2\text{H}$, $-\text{CH}_2\text{NH}_2$, $-\text{CH}_2\text{CH}_2\text{NH}_2$, $-\text{CH}_2\text{OH}$, $-\text{CH}_2\text{CH}_2\text{OH}$, $-\text{CH}_2\text{OCH}_3$, $-\text{CH}_2\text{CH}_2\text{OCH}_3$.

30. ~~At least one~~ A compound chosen from compounds 1 to 323 and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof.

31. A composition comprising at least one compound of any one of claims 1 to 30, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof and at least one pharmaceutically acceptable carrier.

32. A pharmaceutical composition ~~for treating a Syk kinase mediated disease~~ comprising a therapeutically effective amount of a compound of Formula (I) of claims 1 to ~~31~~ and 30 and a pharmaceutically acceptable excipient for use in the treatment of a Syk kinase mediated disease.

33. A medicament ~~for treating a Syk kinase mediated disease~~, wherein the ~~medicament comprises~~ comprising a therapeutically effective amount of a compound of Formula (I) of claims 1 to ~~31~~ 30 for use in the treatment of a Syk kinase mediated disease.

34. Use of a compound of Formula (I) of claims 1 to ~~31~~ 30 in the manufacture of a medicament for treating a Syk- mediated disease in a subject in need thereof.

35. ~~A method for inhibiting a Syk kinase, comprising administering to a system or a subject in need thereof a therapeutically effective amount of a compound of Formula (I) of claims 1 to 31.~~

36. ~~A method for treating a Syk mediated disease comprising administering to a subject in need thereof a therapeutically effective amount of a compound of Formula (I) of claims 1 to 31.~~

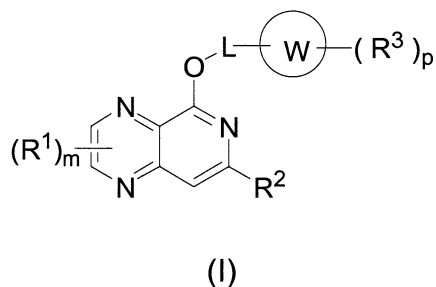
37. ~~The method of claim 36,~~₁ wherein the disease is an inflammatory disease, an allergic disease, a cell- proliferative disease, an autoimmune disease or cytopenia.

38~~35~~₃₅. The ~~method use of~~_{use} claim 37~~34~~₃₄, wherein the disease is allergic asthma, allergic rhinitis, rheumatoid arthritis, multiple sclerosis, lupus, systemic lupus erythematosus, lymphoma, B cell lymphoma, T cell lymphoma, leukemia, myelodysplastic syndrome, anemia, leucopenia, neutropenia, thrombocytopenia, granulocytopenia, pancytopenia or idiopathic thrombocytopenic purpura.

39~~36~~₃₆. A compound ~~of Formula (I) of claims 1 to 30 for use in a method of~~_{of Formula (I) of claims 1 to 30 for use in a method of} medical ~~the treatment, wherein the method of medical treatment is for treating~~_{the treatment, wherein the method of medical treatment is for treating} ~~of a~~_{of a} Syk kinase mediated disease, ~~wherein the disease is~~_{wherein the disease is} ~~selected from allergic asthma,~~_{selected from allergic asthma,} allergic rhinitis, rheumatoid arthritis, multiple sclerosis, lupus, systemic lupus erythematosus, lymphoma, B cell lymphoma, T cell lymphoma, leukemia, myelodysplastic syndrome, anemia, leucopenia, neutropenia, thrombocytopenia, granulocytopenia, pancytopenia and idiopathic thrombocytopenic purpura, ~~and wherein~~_{and wherein} the compound is a compound of Formula (I) of claims 1 to 34.

WHAT IS CLAIMED IS:

1. A compound of formula (I):



and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvatethereof, wherein

R^1 is independently chosen from hydrogen, halo, -CN, -OH, optionally substituted C_1 - C_6 alkyl, optionally substituted C_1 - C_6 alkoxy, - NH_2 , - $NH(C_1$ - C_4 alkyl), and - $N(C_1$ - C_4 alkyl)(C_1 - C_4 alkyl);

R^2 is aryl, or heteroaryl, each of which is optionally substituted by one or more groups selected from halo, - NR^5R^6 , - OR^7 , - $S(O)_nR^8$, - $C(O)R^9$, - $C(O)OR^7$, -CN, - $C(O)NR^5R^6$, - $NR^5C(O)R^9$, - $NR^5S(O)_nR^8$, - $NR^5S(O)_nNR^{10}R^{11}$, - $NR^5C(O)OR^7$, - $NR^5C(O)NR^{10}R^{11}$, - NO_2 , - $S(O)_nNR^5R^6$, optionally substituted lower alkyl, optionally substituted cycloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, optionally substituted aryl, optionally substituted alkenyl, and optionally substituted alkynyl;

L is a bond, or C_1 - C_6 alkylene;

W is cycloalkyl, heterocycle, aryl, or heteroaryl;

R^3 is independently selected from hydrogen, -Lx-halo, -Lx- R^4 , -Lx- NR^5R^6 , -Lx- OR^7 , -Lx- $S(O)_nR^8$, -Lx- $C(O)R^9$, - $S(O)_n$ -Lx- R^8 , - $C(O)$ -Lx- R^9 , -Lx-CN, -Lx- $NR^5C(O)R^9$, -Lx- $NR^5S(O)_nR^8$, -Lx- $NR^5C(O)NR^{10}R^{11}$, -Lx- $NR^5S(O)_nNR^{10}R^{11}$, -Lx- $NR^5C(O)OR^7$, -Lx- $NR^5S(O)_nOR^7$, - NO_2 , -Lx- $C(O)NR^5R^6$, -Lx- $S(O)_nNR^5R^6$, oxo(=O), optionally substituted cycloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, and optionally substituted aryl,

provided when L is methylene and W is 5- or 6- membered heterocycle, R^3 is independently selected from -Lx- NR^5R^6 , -Lx- OR^7 , -Lx- $S(O)_nR^8$, -Lx- $C(O)R^9$, - $S(O)_n$ -Lx- R^8 , - $C(O)$ -Lx- R^9 , -Lx-CN, -Lx- $NR^5C(O)R^9$, -Lx- $NR^5S(O)_nR^8$, -Lx- $NR^5C(O)NR^{10}R^{11}$,

-Lx-NR⁵S(O)_nNR¹⁰R¹¹, -Lx-NR⁵C(O)OR⁷, -Lx-NR⁵S(O)_nOR⁷, -NO₂, -Lx-C(O)NR⁵R⁶, -Lx-S(O)_nNR⁵R⁶, oxo(=O), optionally substituted cycloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, and optionally substituted aryl;

R⁴ is C₁-C₆alkyl, C₂-C₆alkenyl, or C₂-C₆alkynyl, each of which is optionally substituted;

R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, and R¹¹ are independently selected from hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, and heterocycle, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄alkyl), -CN, C₁-C₄alkyl, -NH₂, -NH(C₁-C₄alkyl), -N(C₁-C₄alkyl)(C₁-C₄alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄alkyl), -C(O)N(C₁-C₄alkyl)(C₁-C₄alkyl), -C(O)(C₁-C₄alkyl), -NHC(O)(C₁-C₄alkyl), -N(C₁-C₄alkyl)C(O)(C₁-C₄alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄alkyl), -S(O)_nN(C₁-C₄alkyl)(C₁-C₄alkyl), -S(O)_n(C₁-C₄alkyl), -NHS(O)_n(C₁-C₄alkyl), -N(C₁-C₄alkyl)S(O)_n(C₁-C₄alkyl), optionally substituted C₃-C₈cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄alkyl is optionally substituted by halo, -OH, -OMe, -CN;

or R⁵ and R⁶, R⁵ and R⁷, R⁵ and R⁸, R⁵ and R⁹, and R⁵ and R¹⁰ together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄alkyl), -CN, C₁-C₄alkyl, -NH₂, -NH(C₁-C₄alkyl), -N(C₁-C₄alkyl)(C₁-C₄alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄alkyl), -C(O)N(C₁-C₄alkyl)(C₁-C₄alkyl), -C(O)(C₁-C₄alkyl), -NHC(O)(C₁-C₄alkyl), -N(C₁-C₄alkyl)C(O)(C₁-C₄alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄alkyl), -S(O)_nN(C₁-C₄alkyl)(C₁-C₄alkyl), -S(O)_n(C₁-C₄alkyl), -NHS(O)_n(C₁-C₄alkyl), -N(C₁-C₄alkyl)S(O)_n(C₁-C₄alkyl), optionally substituted C₃-C₈cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄alkyl is optionally substituted by halo, -OH, -OMe, or -CN;

Lx is a bond, or C₁-C₆ alkylene;

m is 0, 1 or 2,

n is 1 or 2,

p is 1, 2 or 3.

2. The compound of claim 1, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R¹ is independently

chosen from hydrogen, halo, -CN, -OH, optionally substituted C₁-C₆ alkyl, optionally substituted C₁-C₆ alkoxy, -NH₂, -NH(C₁-C₄ alkyl), and -N(C₁-C₄ alkyl)(C₁-C₄ alkyl).

3. The compound of claim 2, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R¹ is independently chosen from hydrogen, halo, -CN, -OH; or is chosen from methyl, ethyl, *n*-propyl, *i*-propyl, -NH₂, *N*-methylamino, *N,N*-dimethylamino, *N*-ethylamino, *N-n*-propylamino, *N-i*-propylamino, methoxy, ethoxy, propoxy, isopropoxy, each of which is optionally substituted.

4. The compound of any one of claim 3, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R¹ is hydrogen.

5. The compound of any one of claims 1 to 4, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein m is 1.

6. The compound of any one of claims 1 to 5, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R² is C₅-C₁₀ aryl, or 5-10 membered heteroaryl, each of which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, -S(O)_nNR⁵R⁶, optionally substituted C₁-C₆ alkyl, optionally substituted C₃-C₈ cycloalkyl, optionally substituted 3-8 membered heterocycle, optionally substituted 5-10 membered heteroaryl, optionally substituted C₅-C₁₀ aryl, optionally substituted C₂-C₆ alkenyl, and optionally substituted C₂-C₆ alkynyl,

R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, and R¹¹ are independently selected from hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, and heterocycle, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄alkyl), -CN, C₁-C₄alkyl, -NH₂, -NH(C₁-C₄alkyl), -N(C₁-C₄alkyl)(C₁-C₄alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄alkyl), -C(O)N(C₁-C₄alkyl)(C₁-C₄alkyl), -C(O)(C₁-C₄alkyl), -NHC(O)(C₁-C₄alkyl), -N(C₁-C₄alkyl)C(O)(C₁-C₄alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄alkyl), -S(O)_nN(C₁-C₄alkyl)(C₁-C₄alkyl), -S(O)_n(C₁-C₄alkyl), -NHS(O)_n(C₁-C₄alkyl), -

N(C₁-C₄alkyl)S(O)_n(C₁-C₄alkyl), optionally substituted C₃-C₈cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄alkyl is optionally substituted by halo, -OH, -OMe, -CN;

or R⁵ and R⁶, R⁵ and R⁷, R⁵ and R⁸, R⁵ and R⁹, and R⁵ and R¹⁰ together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄alkyl), -CN, C₁-C₄alkyl, -NH₂, -NH(C₁-C₄alkyl), -N(C₁-C₄alkyl)(C₁-C₄alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄alkyl), -C(O)N(C₁-C₄alkyl)(C₁-C₄alkyl), -C(O)(C₁-C₄alkyl), -NHC(O)(C₁-C₄alkyl), -N(C₁-C₄alkyl)C(O)(C₁-C₄alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄alkyl), -S(O)_nN(C₁-C₄alkyl)(C₁-C₄alkyl), -S(O)_n(C₁-C₄alkyl), -NHS(O)_n(C₁-C₄alkyl), -N(C₁-C₄alkyl)S(O)_n(C₁-C₄alkyl), optionally substituted C₃-C₈cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄alkyl is optionally substituted by halo, -OH, -OMe, or -CN.

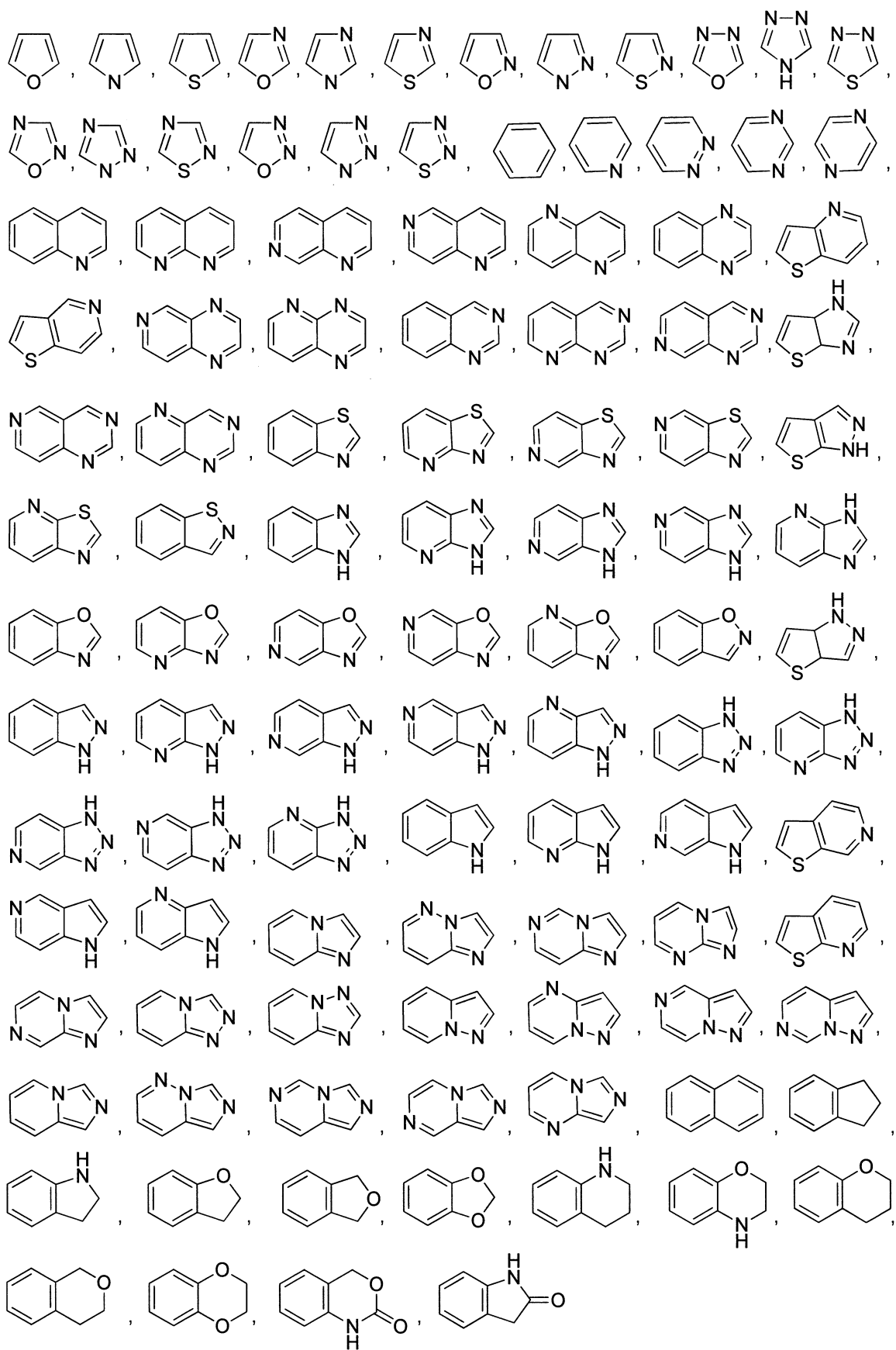
7. The compound of any one of claim 6, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R² is independently chosen from phenyl, naphthyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, quinolyl, and , indanyl, indolyl, indolin-2-one, 2,3-dihydrobenzofuryl, benzo[d][1,3]dioxolyl, and 1,2,3,4-tetrahydroquinolyl, chroman, 2,3-dihydrobenzo[b][1,4]dioxinyl, 3,4-dihydro-2H-benzo[b][1,4]oxazinyl, isochroman, 1,3-dihydroisobenzofuryl, 1H-benzo[d][1,3]oxazin-2(4H)-onyl, each of which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, and -S(O)_nNR⁵R⁶; or selected from methyl, ethyl, *n*-propyl, *i*-propyl, *n*-butyl, *i*-butyl, and *t*-butyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, pyrrolidinyl, tetrahydrofuryl, tetrahydropyranyl, piperidinyl, piperazinyl, morpholinyl, homomorpholinyl, thiomorpholinyl, diazepanyl, oxazepanyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, quinolyl, phenyl, and naphthyl, each of which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -

C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, -S(O)_nNR⁵R⁶, optionally substituted lower alkyl, optionally substituted cycloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, optionally substituted aryl, optionally substituted alkenyl, and optionally substituted alkynyl,

R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, and R¹¹ are independently selected from hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, and heterocycle, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄alkyl), -CN, C₁-C₄alkyl, -NH₂, -NH(C₁-C₄alkyl), -N(C₁-C₄alkyl)(C₁-C₄alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄alkyl), -C(O)N(C₁-C₄alkyl)(C₁-C₄alkyl), -C(O)(C₁-C₄alkyl), -NHC(O)(C₁-C₄alkyl), -N(C₁-C₄alkyl)C(O)(C₁-C₄alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄alkyl), -S(O)_nN(C₁-C₄alkyl)(C₁-C₄alkyl), -S(O)_n(C₁-C₄alkyl), -NHS(O)_n(C₁-C₄alkyl), -N(C₁-C₄alkyl)S(O)_n(C₁-C₄alkyl), optionally substituted C₃-C₈cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄alkyl is optionally substituted by halo, -OH, -OMe, -CN;

or R⁵ and R⁶, R⁵ and R⁷, R⁵ and R⁸, R⁵ and R⁹, and R⁵ and R¹⁰ together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄alkyl), -CN, C₁-C₄alkyl, -NH₂, -NH(C₁-C₄alkyl), -N(C₁-C₄alkyl)(C₁-C₄alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄alkyl), -C(O)N(C₁-C₄alkyl)(C₁-C₄alkyl), -C(O)(C₁-C₄alkyl), -NHC(O)(C₁-C₄alkyl), -N(C₁-C₄alkyl)C(O)(C₁-C₄alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄alkyl), -S(O)_nN(C₁-C₄alkyl)(C₁-C₄alkyl), -S(O)_n(C₁-C₄alkyl), -NHS(O)_n(C₁-C₄alkyl), -N(C₁-C₄alkyl)S(O)_n(C₁-C₄alkyl), optionally substituted C₃-C₈cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄alkyl is optionally substituted by halo, -OH, -OMe, or -CN.

8. The compound of any one of claim 7, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R² is independently chosen from



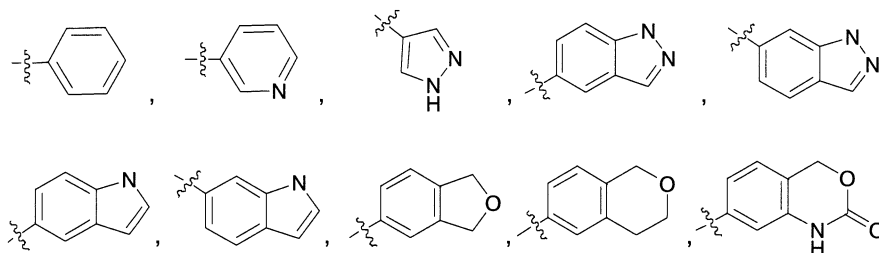
each of which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, and -S(O)_nNR⁵R⁶; or selected from methyl, ethyl, *n*-propyl, *i*-propyl, *n*-butyl, *i*-butyl, and *t*-butyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, pyrrolidinyl, tetrahydrofuryl, tetrahydropyranyl, piperidinyl, piperazinyl, morpholinyl, homomorpholinyl, thiomorpholinyl, diazepanyl, oxazepanyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, quinolinyl, phenyl, and naphthyl, each of which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, -S(O)_nNR⁵R⁶, optionally substituted lower alkyl, optionally substituted cycloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, optionally substituted aryl, optionally substituted alkenyl, and optionally substituted alkynyl,

R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, and R¹¹ are independently selected from hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, and heterocycle, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN,

or R⁵ and R⁶, R⁵ and R⁷, R⁵ and R⁸, R⁵ and R⁹, and R⁵ and R¹⁰ together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl),

optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN.

9 The compound of any one of claim 8, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R² is independently chosen from

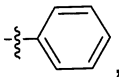


each of which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, and -S(O)_nNR⁵R⁶; or selected from methyl, ethyl, *n*-propyl, *i*-propyl, *n*-butyl, *i*-butyl, and *t*-butyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, pyrrolidinyl, tetrahydrofuryl, tetrahydropyranyl, piperidinyl, piperazinyl, morpholinyl, homomorpholinyl, thiomorpholinyl, diazepanyl, oxazepanyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, quinolyl, phenyl, and naphthyl, each of which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, -S(O)_nNR⁵R⁶, optionally substituted lower alkyl, optionally substituted cycloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, optionally substituted aryl, optionally substituted alkenyl, and optionally substituted alkynyl,

R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, and R¹¹ are independently selected from hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, and heterocycle, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄

alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN,

or R⁵ and R⁶, R⁵ and R⁷, R⁵ and R⁸, R⁵ and R⁹, and R⁵ and R¹⁰ together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN.

10. The compound of any one of claim 9, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R² is ,

which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, and -S(O)_nNR⁵R⁶; or selected from methyl, ethyl, *n*-propyl, *i*-propyl, *n*-butyl, *i*-butyl, and *t*-butyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, pyrrolidinyl, tetrahydrofuryl, tetrahydropyranyl, piperidinyl, piperazinyl, morpholinyl, homomorpholinyl, thiomorpholinyl, diazepanyl, oxazepanyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, quinolinyl, phenyl, and naphthyl, each of which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, -S(O)_nNR⁵R⁶, optionally substituted lower alkyl, optionally substituted cycloalkyl, optionally substituted heterocycle, optionally substituted

heteroaryl, optionally substituted aryl, optionally substituted alkenyl, and optionally substituted alkynyl,

R^5 , R^6 , R^7 , R^8 , R^9 , R^{10} , and R^{11} are independently selected from hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, and heterocycle, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN,

or R^5 and R^6 , R^5 and R^7 , R^5 and R^8 , R^5 and R^9 , and R^5 and R^{10} together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN.

11. The compound of any one of claims 1 to 10, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein L is a bond, or C₁-C₆ alkylene.

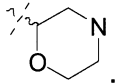
12. The compound of any one of claim 11, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein L is a bond, or -CH₂-, or -CH₂-CH₂-.

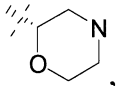
13. The compound of any one of claims 1 to 12, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein W is C₃-C₈ cycloalkyl, 3-8 membered heterocycle, C₅-C₁₀ aryl, or 5-10 membered heteroaryl.

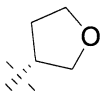
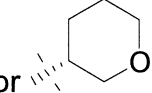
14. The compound of any one of claim 13, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein W is cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, pyrrolidinyl, tetrahydrofuryl, tetrahydropyranyl, piperidinyl, piperazinyl, morpholinyl, homomorpholinyl, thiomorpholinyl, phenyl, naphthyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, or quinolinyl.

15. The compound of any one of claim 14, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein W is cyclohexyl, tetrahydrofuryl, tetrahydropyranyl, piperidinyl, morpholinyl, phenyl, or pyrazolyl.

16. The compound of any one of claim 15, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein W is tetrahydrofuryl, tetrahydropyranyl, or morpholinyl.

17. The compound of any one of claim 16, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein W is .

18. The compound of any one of claim 16, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein W is , which is substituted by R³ on nitrogen atom.

19. The compound of any one of claim 16, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein W is  or .

20. The compound of any one of claims 1 to 19, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R³ is independently selected from hydrogen, -Lx-halo, -Lx-R⁴, -Lx-NR⁵R⁶, -Lx-OR⁷, -Lx-S(O)_nR⁸, -Lx-

C(O)R⁹, -S(O)_n-Lx-R⁸, -C(O)-Lx-R⁹, -Lx-CN, -Lx-NR⁵C(O)R⁹, -Lx-NR⁵S(O)_nR⁸, -Lx-NR⁵C(O)NR¹⁰R¹¹, -Lx-NR⁵S(O)_nNR¹⁰R¹¹, -Lx-NR⁵C(O)OR⁷, -Lx-NR⁵S(O)_nOR⁷, -NO₂, -Lx-C(O)NR⁵R⁶, -Lx-S(O)_nNR⁵R⁶, oxo(=O), optionally substituted C₃-C₈cycloalkyl, optionally substituted 3-8 membered heterocycle, optionally substituted C₅-C₁₀aryl, and optionally substituted 5-10 membered heteroaryl, provided when L is methylene and W is 5- or 6- membered heterocycle, R³ is independently selected from -Lx-NR⁵R⁶, -Lx-OR⁷, -Lx-S(O)_nR⁸, -Lx-C(O)R⁹, -S(O)_n-Lx-R⁸, -C(O)-Lx-R⁹, -Lx-CN, -Lx-NR⁵C(O)R⁹, -Lx-NR⁵S(O)_nR⁸, -Lx-NR⁵C(O)NR¹⁰R¹¹, -Lx-NR⁵S(O)_nNR¹⁰R¹¹, -Lx-NR⁵C(O)OR⁷, -Lx-NR⁵S(O)_nOR⁷, -NO₂, -Lx-C(O)NR⁵R⁶, -Lx-S(O)_nNR⁵R⁶, oxo(=O), optionally substituted C₃-C₈cycloalkyl, optionally substituted 3-8 membered heterocycle, optionally substituted C₅-C₁₀aryl, and optionally substituted 5-10 membered heteroaryl

R⁴ is optionally substituted C₁-C₄alkyl,

R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, and R¹¹ are independently selected from hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, and heterocycle, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN,

or R⁵ and R⁶, R⁵ and R⁷, R⁵ and R⁸, R⁵ and R⁹, and R⁵ and R¹⁰ together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN;

Lx is a bond, or C₁-C₆ alkylene.

21. The compound of any one of claim 20, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R^3 is independently selected from hydrogen, -Lx-halo, -Lx- R^4 , -Lx- NR^5R^6 , -Lx- OR^7 , -Lx- $S(O)_nR^8$, -Lx- $C(O)R^9$, - $S(O)_n$ -Lx- R^8 , - $C(O)$ -Lx- R^9 , -Lx-CN, -Lx- $NR^5C(O)R^9$, -Lx- $NR^5S(O)_nR^8$, -Lx- $NR^5C(O)NR^{10}R^{11}$, -Lx- $NR^5S(O)_nNR^{10}R^{11}$, -Lx- $NR^5C(O)OR^7$, -Lx- $NR^5S(O)_nOR^7$, - NO_2 , -Lx- $C(O)NR^5R^6$, -Lx- $S(O)_nNR^5R^6$, oxo(=O), or selected from cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, pyrrolidiny, tetrahydrofuryl, tetrahydropyrany, piperidiny, piperaziny, morpholiny, homomorpholiny, thiomorpholiny, diazepany, oxazepany, phenyl, naphthyl, pyridyl, pyrimidiny, pyraziny, pyridaziny, pyrroly, pyrazoly, imidazoliny, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazoliny, indolyl, indazolyl, and quinoliny, each of which is optionally substituted, provided when L is methylene and W is 5- or 6- membered heterocycle, R^3 is independently selected from -Lx- NR^5R^6 , -Lx- OR^7 , -Lx- $S(O)_nR^8$, -Lx- $C(O)R^9$, - $S(O)_n$ -Lx- R^8 , - $C(O)$ -Lx- R^9 , -Lx-CN, -Lx- $NR^5C(O)R^9$, -Lx- $NR^5S(O)_nR^8$, -Lx- $NR^5C(O)NR^{10}R^{11}$, -Lx- $NR^5S(O)_nNR^{10}R^{11}$, -Lx- $NR^5C(O)OR^7$, -Lx- $NR^5S(O)_nOR^7$, - NO_2 , -Lx- $C(O)NR^5R^6$, -Lx- $S(O)_nNR^5R^6$, oxo(=O),

R^4 is methyl, ethyl, *n*-propyl, *i*-propyl, *n*-butyl, *i*-butyl, and *t*-butyl, each of which is optionally substituted

R^5 , R^6 , R^7 , R^8 , R^9 , R^{10} , and R^{11} are independently selected from hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, and heterocycle, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, - $O(C_1-C_4 \text{ alkyl})$, -CN, C_1-C_4 alkyl, - NH_2 , - $NH(C_1-C_4 \text{ alkyl})$, - $N(C_1-C_4 \text{ alkyl})(C_1-C_4 \text{ alkyl})$, - $C(O)NH_2$, - $C(O)NH(C_1-C_4 \text{ alkyl})$, - $C(O)N(C_1-C_4 \text{ alkyl})(C_1-C_4 \text{ alkyl})$, - $C(O)(C_1-C_4 \text{ alkyl})$, - $NHC(O)(C_1-C_4 \text{ alkyl})$, - $N(C_1-C_4 \text{ alkyl})C(O)(C_1-C_4 \text{ alkyl})$, - $S(O)_nNH_2$, - $S(O)_nNH(C_1-C_4 \text{ alkyl})$, - $S(O)_nN(C_1-C_4 \text{ alkyl})(C_1-C_4 \text{ alkyl})$, - $S(O)_n(C_1-C_4 \text{ alkyl})$, - $NHS(O)_n(C_1-C_4 \text{ alkyl})$, - $N(C_1-C_4 \text{ alkyl})S(O)_n(C_1-C_4 \text{ alkyl})$, optionally substituted C_3-C_8 cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C_1-C_4 alkyl is optionally substituted by halo, -OH, -OMe, or -CN,

or R^5 and R^6 , R^5 and R^7 , R^5 and R^8 , R^5 and R^9 , and R^5 and R^{10} together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, - $O(C_1-C_4 \text{ alkyl})$, -CN, C_1-C_4 alkyl, - NH_2 , - $NH(C_1-C_4 \text{ alkyl})$, - $N(C_1-C_4 \text{ alkyl})(C_1-C_4 \text{ alkyl})$, - $C(O)NH_2$, - $C(O)NH(C_1-C_4 \text{ alkyl})$,

-C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN;

Lx is a bond, or C₁-C₄alkylene.

22. The compound of any one of claim 21, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R³ is independently selected from hydrogen, -Lx-OR⁷, -Lx-S(O)_nR⁸, -Lx-C(O)R⁹, -S(O)_n-Lx-R⁸, -C(O)-Lx-R⁹, -Lx-NR⁵C(O)R⁹, -Lx-NR⁵S(O)_nR⁸, -Lx-NR⁵C(O)NR¹⁰R¹¹, -Lx-NR⁵S(O)_nNR¹⁰R¹¹, -Lx-C(O)NR⁵R⁶, -Lx-S(O)_nNR⁵R⁶, and oxo(=O);

R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, and R¹¹ are independently selected from hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, and heterocycle, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN,

or R⁵ and R⁶, R⁵ and R⁷, R⁵ and R⁸, R⁵ and R⁹, and R⁵ and R¹⁰ together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN;

Lx is a bond, or C₁-C₄alkylene.

23. The compound of any one of claims 1 to 22, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R^5 , R^6 , R^7 , R^8 , R^9 , R^{10} , and R^{11} are independently selected from hydrogen, C_1 - C_4 alkyl, C_3 - C_8 cycloalkyl, C_5 - C_{10} aryl, 5-10 membered heteroaryl, and 3-8 membered heterocycle, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C_1 - C_4 alkyl), -CN, C_1 - C_4 alkyl, -NH₂, -NH(C_1 - C_4 alkyl), -N(C_1 - C_4 alkyl)(C_1 - C_4 alkyl), -C(O)NH₂, -C(O)NH(C_1 - C_4 alkyl), -C(O)N(C_1 - C_4 alkyl)(C_1 - C_4 alkyl), -C(O)(C_1 - C_4 alkyl), -NHC(O)(C_1 - C_4 alkyl), -N(C_1 - C_4 alkyl)C(O)(C_1 - C_4 alkyl), -S(O)_nNH₂, -S(O)_nNH(C_1 - C_4 alkyl), -S(O)_nN(C_1 - C_4 alkyl)(C_1 - C_4 alkyl), -S(O)_n(C_1 - C_4 alkyl), -NHS(O)_n(C_1 - C_4 alkyl), -N(C_1 - C_4 alkyl)S(O)_n(C_1 - C_4 alkyl), optionally substituted C_3 - C_8 cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C_1 - C_4 alkyl is optionally substituted by halo, -OH, -OMe, or -CN.

24. The compound of any one of claim 23, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein R^5 , R^6 , R^7 , R^8 , R^9 , R^{10} , and R^{11} are independently selected from hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, *n*-butyl, *i*-butyl, and *t*-butyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, phenyl, naphthyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, quinolinyl, pyrrolidinyl, tetrahydrofuryl, tetrahydropyranyl, piperidinyl, piperazinyl, morpholinyl, homomorpholinyl, thiomorpholinyl, diazepanyl, and oxazepanyl, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C_1 - C_4 alkyl), -CN, C_1 - C_4 alkyl, -NH₂, -NH(C_1 - C_4 alkyl), -N(C_1 - C_4 alkyl)(C_1 - C_4 alkyl), -C(O)NH₂, -C(O)NH(C_1 - C_4 alkyl), -C(O)N(C_1 - C_4 alkyl)(C_1 - C_4 alkyl), -C(O)(C_1 - C_4 alkyl), -NHC(O)(C_1 - C_4 alkyl), -N(C_1 - C_4 alkyl)C(O)(C_1 - C_4 alkyl), -S(O)_nNH₂, -S(O)_nNH(C_1 - C_4 alkyl), -S(O)_nN(C_1 - C_4 alkyl)(C_1 - C_4 alkyl), -S(O)_n(C_1 - C_4 alkyl), -NHS(O)_n(C_1 - C_4 alkyl), -N(C_1 - C_4 alkyl)S(O)_n(C_1 - C_4 alkyl), optionally substituted C_3 - C_8 cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C_1 - C_4 alkyl is optionally substituted by halo, -OH, -OMe, or -CN.

25. The compound of any one of claims 1 to 22, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one

pharmaceutically acceptable salt, or solvate thereof, wherein R⁵ and R⁶, R⁵ and R⁷, R⁵ and R⁸, R⁵ and R⁹, and R⁵ and R¹⁰ together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN.

26. The compound of any one of claim 25, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein Lx is a bond, or C₁-C₄alkylene.

27. The compound of any one of claims 1 to 26, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein p is 1 or 2.

28. The compound of formula (I) according to claim 1, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein

R¹ is independently chosen from hydrogen, halo, -CN, -OH; or is chosen from methyl, ethyl, *n*-propyl, *i*-propyl, -NH₂, *N*-methylamino, *N,N*-dimethylamino, *N*-ethylamino, *N-n*-propylamino, *N-i*-propylamino, methoxy, ethoxy, propoxy, isopropoxy, each of which is optionally substituted,

R² is independently chosen from phenyl, naphthyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, quinolinyl, and , indanyl, indolinyl, indolin-2-one, 2,3-dihydrobenzofuryl, benzo[d][1,3]dioxolyl, and 1,2,3,4-tetrahydroquinolinyl, chroman, 2,3-dihydrobenzo[b][1,4]dioxinyl, 3,4-dihydro-2*H*-benzo[b][1,4]oxazinyl, isochroman, 1,3-dihydroisobenzofuryl, 1*H*-benzo[d][1,3]oxazin-2(4*H*)-onyl, each of which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -

NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, and -S(O)_nNR⁵R⁶; or selected from methyl, ethyl, *n*-propyl, *i*-propyl, *n*-butyl, *i*-butyl, and *t*-butyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, pyrrolidinyl, tetrahydrofuryl, tetrahydropyranyl, piperidinyl, piperazinyl, morpholinyl, homomorpholinyl, thiomorpholinyl, diazepanyl, oxazepanyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, quinolyl, phenyl, and naphthyl, each of which is optionally substituted by one or more groups selected from halo, -NR⁵R⁶, -OR⁷, -S(O)_nR⁸, -C(O)R⁹, -C(O)OR⁷, -CN, -C(O)NR⁵R⁶, -NR⁵C(O)R⁹, -NR⁵S(O)_nR⁸, -NR⁵S(O)_nNR¹⁰R¹¹, -NR⁵C(O)OR⁷, -NR⁵C(O)NR¹⁰R¹¹, -NO₂, -S(O)_nNR⁵R⁶, optionally substituted lower alkyl, optionally substituted cycloalkyl, optionally substituted heterocycle, optionally substituted heteroaryl, optionally substituted aryl, optionally substituted alkenyl, and optionally substituted alkynyl,

L is a bond, or C₁-C₆ alkylene,

W is cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, pyrrolidinyl, tetrahydrofuryl, tetrahydropyranyl, piperidinyl, piperazinyl, morpholinyl, homomorpholinyl, thiomorpholinyl, phenyl, naphthyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, or quinolyl,

R³ is independently selected from hydrogen, -Lx-halo, -Lx-R⁴, -Lx-NR⁵R⁶, -Lx-OR⁷, -Lx-S(O)_nR⁸, -Lx-C(O)R⁹, -S(O)_n-Lx-R⁸, -C(O)-Lx-R⁹, -Lx-CN, -Lx-NR⁵C(O)R⁹, -Lx-NR⁵S(O)_nR⁸, -Lx-NR⁵C(O)NR¹⁰R¹¹, -Lx-NR⁵S(O)_nNR¹⁰R¹¹, -Lx-NR⁵C(O)OR⁷, -Lx-NR⁵S(O)_nOR⁷, -NO₂, -Lx-C(O)NR⁵R⁶, -Lx-S(O)_nNR⁵R⁶, and oxo(=O), provided when L is methylene and W is 5- or 6- membered heterocycle, R³ is independently selected from -Lx-NR⁵R⁶, -Lx-OR⁷, -Lx-S(O)_nR⁸, -Lx-C(O)R⁹, -S(O)_n-Lx-R⁸, -C(O)-Lx-R⁹, -Lx-CN, -Lx-NR⁵C(O)R⁹, -Lx-NR⁵S(O)_nR⁸, -Lx-NR⁵C(O)NR¹⁰R¹¹, -Lx-NR⁵S(O)_nNR¹⁰R¹¹, -Lx-NR⁵C(O)OR⁷, -Lx-NR⁵S(O)_nOR⁷, -NO₂, -Lx-C(O)NR⁵R⁶, -Lx-S(O)_nNR⁵R⁶, oxo(=O),

R⁴ is methyl, ethyl, *n*-propyl, *i*-propyl, *n*-butyl, *i*-butyl, and *t*-butyl, each of which is optionally substituted,

R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, and R¹¹ are independently selected from hydrogen, methyl, ethyl, *n*-propyl, *i*-propyl, *n*-butyl, *i*-butyl, and *t*-butyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclopentenyl, cyclohexyl, cyclohexenyl, phenyl, naphthyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, pyrrolyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, thienyl, furyl, benzofuryl, benzothienyl, benzoimidazolyl, indolyl, indazolyl, quinolyl, pyrrolidinyl, tetrahydrofuryl, tetrahydropyranyl, piperidinyl, piperazinyl, morpholinyl, homomorpholinyl, thiomorpholinyl, diazepanyl, and oxazepanyl, each of which except for hydrogen, is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN,

or R⁵ and R⁶, R⁵ and R⁷, R⁵ and R⁸, R⁵ and R⁹, and R⁵ and R¹⁰ together with the atom(s) to which they are attached can form a ring, which is optionally substituted with one or more groups selected from halo, -OH, -O(C₁-C₄ alkyl), -CN, C₁-C₄ alkyl, -NH₂, -NH(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)NH₂, -C(O)NH(C₁-C₄ alkyl), -C(O)N(C₁-C₄ alkyl)(C₁-C₄ alkyl), -C(O)(C₁-C₄ alkyl), -NHC(O)(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)C(O)(C₁-C₄ alkyl), -S(O)_nNH₂, -S(O)_nNH(C₁-C₄ alkyl), -S(O)_nN(C₁-C₄ alkyl)(C₁-C₄ alkyl), -S(O)_n(C₁-C₄ alkyl), -NHS(O)_n(C₁-C₄ alkyl), -N(C₁-C₄ alkyl)S(O)_n(C₁-C₄ alkyl), optionally substituted C₃-C₈ cycloalkyl, and optionally substituted 3-8 membered heterocycle, wherein C₁-C₄ alkyl is optionally substituted by halo, -OH, -OMe, or -CN,

L_x is a bond, or C₁-C₄ alkylene,

m is 0, 1 or 2,

n is 1 or 2,

p is 1, 2 or 3.

29. The compound of any one of claims 1 to 28, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof, wherein the optionally

substituted lower alkyl is chosen from -CF₃, -CF₂H, -CH₂NH₂, -CH₂CH₂NH₂, -CH₂OH, -CH₂CH₂OH, -CH₂OCH₃, -CH₂CH₂OCH₃.

30. A compound chosen from compounds 1 to 323 and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof.

31. A composition comprising at least one compound of any one of claims 1 to 30, and/or its racemic mixture, enantiomers, diastereomers, tautomers, or mixtures of optional ratio, or at least one pharmaceutically acceptable salt, or solvate thereof and at least one pharmaceutically acceptable carrier.

32. A pharmaceutical composition comprising a therapeutically effective amount of a compound of Formula (I) of claims 1 to 30 and a pharmaceutically acceptable excipient for use in the treatment of a Syk kinase mediated disease.

33. A medicament comprising a therapeutically effective amount of a compound of Formula (I) of claims 1 to 30 for use in the treatment of a Syk kinase mediated disease.

34. Use of a compound of Formula (I) of claims 1 to 30 in the manufacture of a medicament for treating a Syk- mediated disease in a subject in need thereof, wherein the disease is an inflammatory disease, an allergic disease, a cell-proliferative disease, an autoimmune disease or cytopenia.

35. The use of claim 34, wherein the disease is allergic asthma, allergic rhinitis, rheumatoid arthritis, multiple sclerosis, lupus, systemic lupus erythematosus, lymphoma, B cell lymphoma, T cell lymphoma, leukemia, myelodysplastic syndrome, anemia, leucopenia, neutropenia, thrombocytopenia, granulocytopenia, pancytopenia or idiopathic thrombocytopenic purpura.

36. A compound of Formula (I) of claims 1 to 30 for use in the treatment of a Syk kinase mediated disease selected from allergic asthma, allergic rhinitis, rheumatoid arthritis, multiple sclerosis, lupus, systemic lupus erythematosus, lymphoma, B cell lymphoma, T cell lymphoma, leukemia, myelodysplastic syndrome, anemia, leucopenia, neutropenia, thrombocytopenia, granulocytopenia, pancytopenia and idiopathic thrombocytopenic purpura.