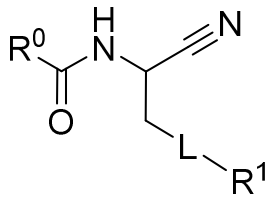
CLAIMS

1. A compound of formula (I)



(I)

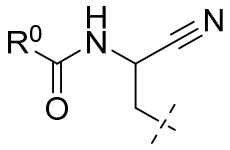
or a pharmaceutically acceptable salt or deuterated form thereof,

wherein:

R^0 is

- 5-12 membered monocyclic heterocyclyl containing 1-3 heteroatoms selected from N, S, or O, wherein the monocyclic heterocycle is optionally substituted with 1-3 R^8, or
- 5-12-membered polycyclic heterocyclyl containing 1-3 heteroatoms selected from N, S, or O, wherein the polycyclic heterocycle is optionally substituted with 1-3 R^8,

each R^8 is independently selected from H, halogen, oxo, cyano, hydroxyl, NH_2, $NH(C_{1-6}alkyl)$, $N(C_{1-6}alkyl)_2$, COOH, C_{1-6} alkyl, C_{1-6} alkyl-OH, $-CONH_2$, $-S(=O)NH_2$, $-S(O)_2NH_2$, C_{1-6}alkoxy, halogenated C_{1-6}alkoxy, C_{1-6} alkylene-carbocyclyl, or C_{1-6} alkylene-heteroaryl;

L is polycyclic cycloalkylene, polycyclic arylene, or polycyclic heteroarylene, wherein a first atom of a first ring of the polycyclic arylene or heteroarylene is connected to  and a second atom of a second ring of the polycyclic arylene or heteroarylene is connected to R^1;

wherein L is independently substituted by 0-4 R^{10};

each R^{10} is independently =O, halogen, C_{1-6}alkyl, C_{1-6}alkoxy, S-C_{1-6}alkyl, C_{2-6}alkenyl, C_{2-6}alkynyl, C_{3-6}cycloalkyl, cyano, hydroxy, NH_2, -NH-C_{1-6} alkyl, $N(C_{1-6}alkyl)_2$, COOH, COC_{1-6} alkyl, $COOC_{1-6}$alkyl, CON_{1-6}alkyl, $CON(C_{1-6}alkyl)_2$, $NHCOC_{1-6}$alkyl, or heterocycle; wherein each alkyl, alkoxy, alkenyl, alkynyl, cycloalkyl, and heterocycle are independently optionally substituted with 1-3 substituents selected from halogen, cyano, hydroxyl, NH_2 and COOH;

R^1 is

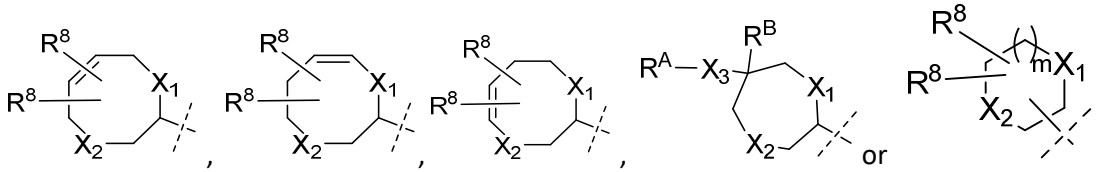
- 5-12 membered carbocyclyl optionally substituted with 1-3 R^g,
- 6-18 membered aryl optionally substituted with 1-3 R^g,

- 5-12 membered monocyclic heterocyclyl containing 1-3 heteroatoms selected from N, S or O, wherein the monocyclic heterocyclyl is optionally substituted with 1-3 R^g,
- 5-12 membered monocyclic heteroaryl containing 1-3 heteroatoms selected from N, S or O, wherein the monocyclic heteroaryl is optionally substituted with 1-3 R^g,
- 7-14 membered bicyclic heteroaryl containing 1-3 heteroatoms selected from N, S or O, wherein the bicyclic heteroaryl is optionally substituted with 1-4 R^g, or
- 7-20 membered tricyclic heteroaryl containing 1-3 heteroatoms selected from N, S or O, wherein the tricyclic heteroaryl is optionally substituted with 1-5 R^g,

each R^g is independently selected from hydrogen, SF_5, =O, halogen, cyano, hydroxyl, nitro, NH_2, -COOH, C_{1-6} alkyl, C_{1-6} alkoxy, C_{3-6} cycloalkyloxy, C_{2-6}alkenyloxy, C_{2-6} alkynyloxy, C_{3-6} cycloalkyl, C_{2-6} alkenyl, C_{2-5} alkynyl, -NHC_{1-6} alkyl, -$N(C_{1-6}$ alkyl$)_2$, -COC_{1-6}alkyl, -$COOC_{1-6}$ alkyl, -$CONH_2$, -$CONHC_{1-6}$ alkyl, -$CONHC_{3-6}$ cycloalkyl, -$CON(C_{1-6}$ alkyl$)_2$, -$NHCOC_{1-6}$alkyl, -$NHCOC_{3-5}$cycloalkyl, -P(O)(C_{1-6} alkyl), -$S(O)C_{1-6}$alkyl, -$S(O)_2C_{1-6}$ alkyl, -$S(O)_2C_{3-6}$cycloalkyl, -SO_2-3-7 membered heterocyclyl, -$S(O)NH_2$, -$S(O)NHC_{1-6}$ alkyl, -$S(O)N(C_{1-6}$ alkyl$)_2$, -$S(O)_2NH_2$, -OSO_2-C_{1-6}alkyl, C_{1-6}alkylene-O-C_{1-6}alkyl, C_{3-8}-cycloalkenyloxy, aryl, heteroaryl, 3-7-membered heterocycle containing 1-3 heteroatoms selected from N, S and O, and the R^g is optionally further substituted with 1-3 groups selected from C_{1-6} alkyl, C_{1-6} haloalkyl, C_{1-6}-alkylene-OH, -$CONH_2$, NH_2, C_{1-6} alkoxy, hydroxyl, -COOH, halogen, or a 5-7-membered heterocycle containing 1-3 heteroatoms selected from N, S or O, wherein the 5-7-membered heterocycle is optionally substituted with 1-2 groups selected from =O, halogen, cyano, C_{1-6} alkyl, and C_{1-6} haloalkyl.

2. The compound of claim 1, or a pharmaceutically acceptable salt or deuterated form thereof, wherein R^0 is 5-12 membered monocyclic heterocycle containing 1-3 heteroatoms selected from N, S, or O, wherein the monocyclic heterocycle is optionally substituted with 1-3 R^8.

3. The compound of claim 1 or 2, or a pharmaceutically acceptable salt or deuterated form thereof, wherein R^0 is



or

X_1 and X_2 are independently O, S, NH, N(C_{1-6}alkyl), or $CR^{12}R^{13}$, wherein at least one of X_1 and X_2 are not $CR^{12}R^{13}$;

X_3 is O, S, NH, or N(C_{1-6}alkyl);

R^8 is H, halogen, oxo, cyano, hydroxyl, NH_2, $NH(C_{1-6}alkyl)$, $N(C_{1-6}alkyl)_2$, COOH, C_{1-6} alkyl, C_{1-6} alkyl-OH, $-CONH_2$, $-S(=O)NH_2$, $-S(O)_2NH_2$, C_{1-6}alkoxy or halogenated C_{1-6}alkoxy;

R^{12} is H, halogen, cyano, hydroxyl, NH_2, $NH(C_{1-6}alkyl)$, $N(C_{1-6}alkyl)_2$, COOH, C_{1-6} alkyl, C_{1-6} alkyl-OH, $-CONH_2$, $-S(=O)NH_2$, $-S(O)_2NH_2$, C_{1-6}alkoxy or halogenated C_{1-6}alkoxy

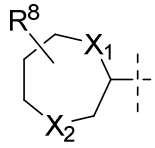
R^{13} is independently H, halogen or C_1-C_6 alkyl;

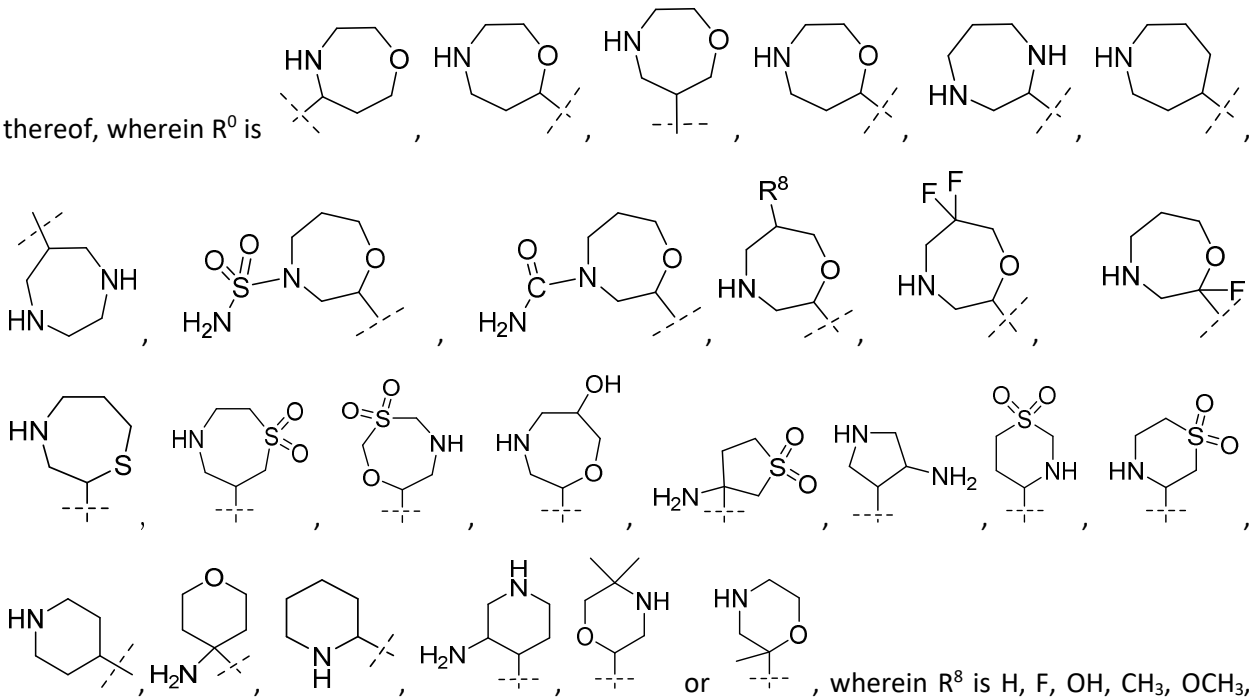
R^A is H, C_{1-6}alkyl, C_{1-6}alkylene-carbocyclyl, or C_{1-6}alkylene-heteroaryl; and

R^B is C_{1-6}alkyl, C_{2-6}alkenyl, C_{1-6}alkylene-carbocyclyl, or C_{1-6}alkylene-heteroaryl, or

R^A and R^B are taken together to form a heterocyclyl; and

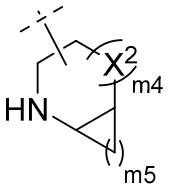
m is 0, 1, 2 or 3.

4. The compound of claim 1, or a pharmaceutically acceptable salt or deuterated form thereof, wherein R^0 is  , X_1 is O, X_2 is NH, and R^8 is C_{1-6}alkoxy.

5. The compound of any one of claims 1-3, or a pharmaceutically acceptable salt or deuterated form thereof, wherein R^0 is  , wherein R^8 is H, F, OH, CH_3, OCH_3, $OCHF_2$, OCF_3, OCH_2CH_3, or $-CH_2OCH_3$.

6. The compound of claim 1, or a pharmaceutically acceptable salt or deuterated form thereof, wherein R^0 is 5-12-membered polycyclic heterocycle containing 1-3 heteroatoms selected from N, S, O, wherein the polycyclic heterocycle is optionally substituted with 1-3 R^8.

7. The compound of claim 1, or a pharmaceutically acceptable salt or deuterated form thereof, wherein R^0 is



,

m4 is 0 or 1,

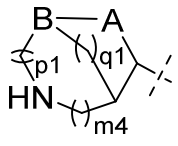
m5 is 1 or 2,

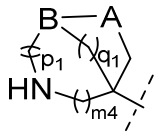
X^2 is O, S, NH, N(C_{1-6}alkyl), or $CR^{12}R^{13}$,

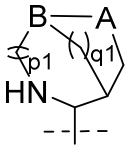
R^{12} is selected from H, halogen, cyano, hydroxyl, NH_2, NH(C_{1-6}alkyl), N(C_{1-6}alkyl)$_2$, COOH, C_{1-6} alkyl, -$CONH_2$, -S(=O)NH_2, -S(O)$_2NH_2$, C_{1-6}alkoxy or halogenated C_{1-6}alkoxy;

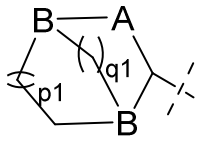
R^{13} is independently H, F, Cl, Br, I or C_1-C_6 alkyl.

8. The compound of claim 6, or a pharmaceutically acceptable salt or deuterated form thereof, wherein R^0 is 7-12 membered bridged heterocycle containing 1-3 heteroatoms selected from N, S, O, wherein the bridged heterocycle is optionally substituted with 1-3 R^8.

9. The compound of claim 8, or a pharmaceutically acceptable salt or deuterated form thereof, wherein R^0 is 

, 

, 

, or 

each of which is optionally substituted with 1-4 R^8, wherein

A is a bond, -O-, -O-CH_2-, -CH_2-O-CH_2-, -$CH_2OCH_2CH_2$-, -CH_2-, -CH_2CH_2-, or -CH_2NH-,

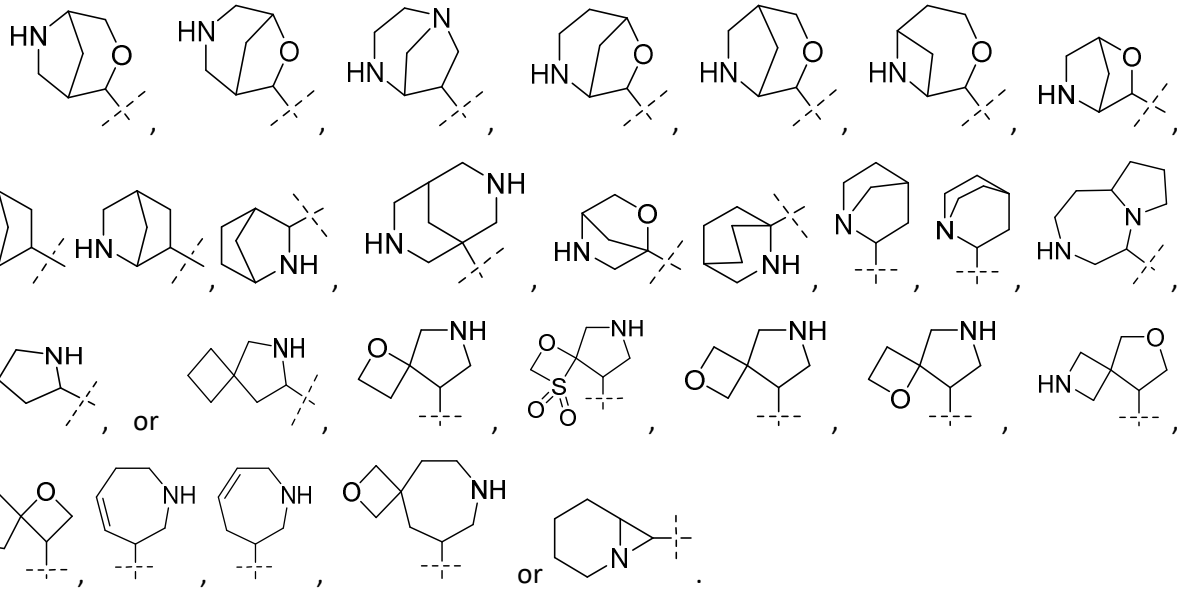
B is N or CH,

m^4 is 0 or 1,

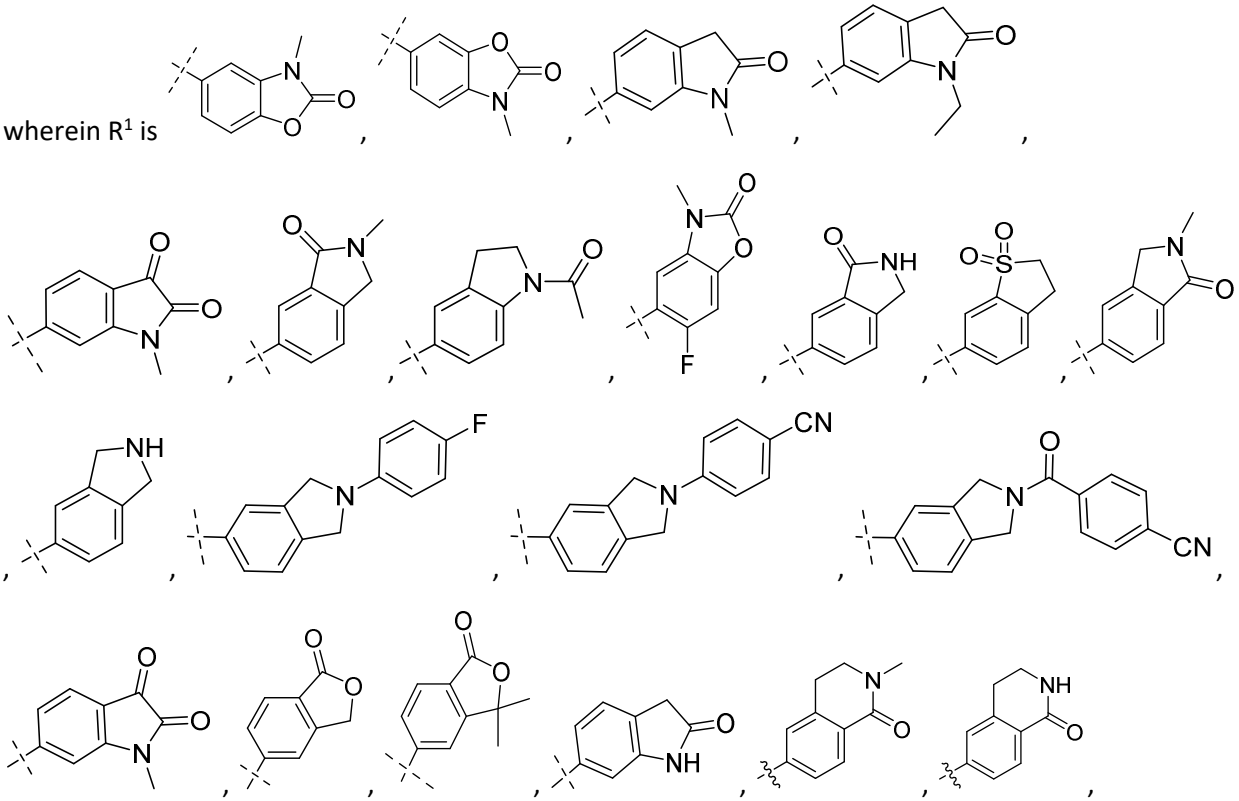
p^1 is 0, 1, or 2,

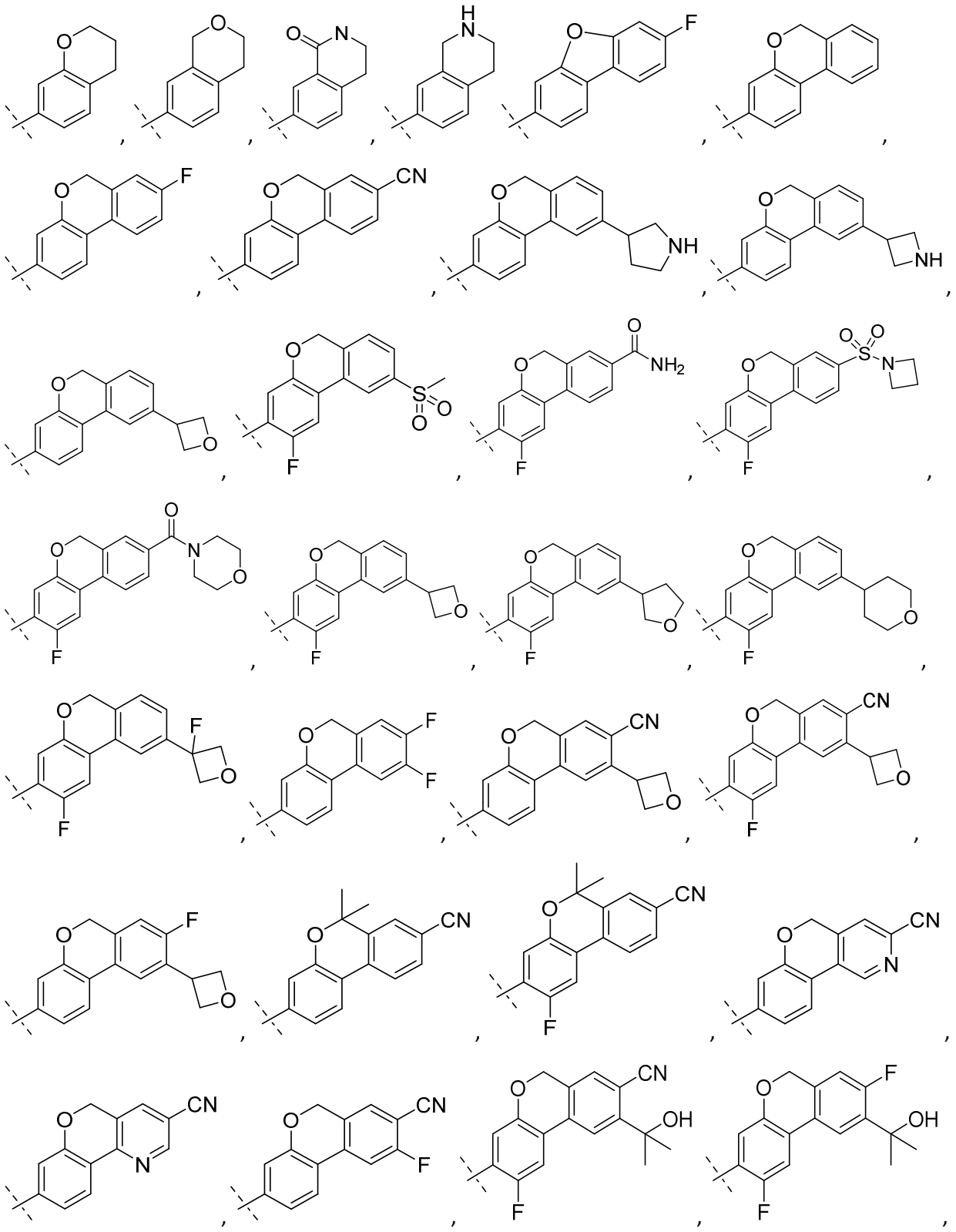
q^1 is 1, 2, or 3.

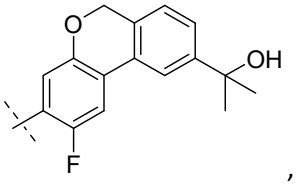
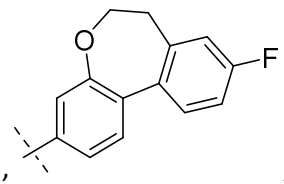
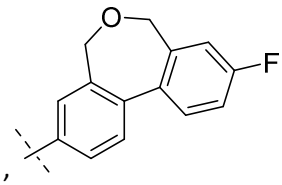
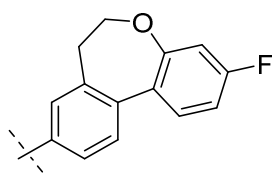
10. The compound of claim 1, or a pharmaceutically acceptable salt or deuterated form thereof, wherein

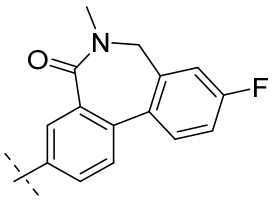
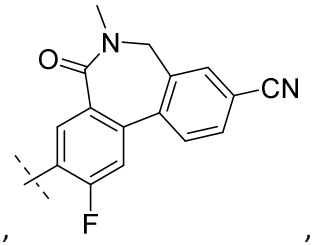
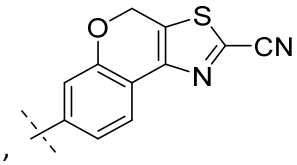
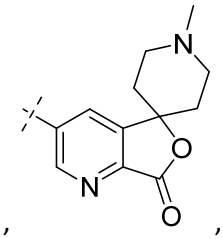
R^0 is 

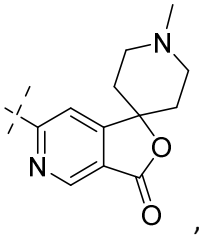
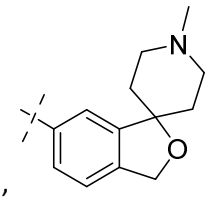
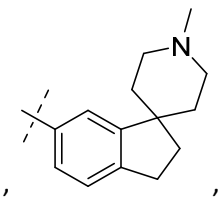
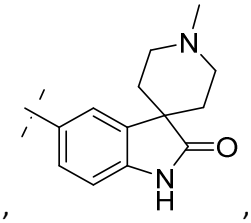
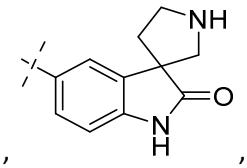
11. The compound of claim 1, or a pharmaceutically acceptable salt or deuterated form thereof,

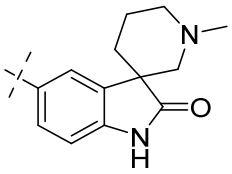
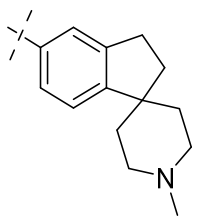
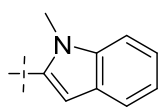
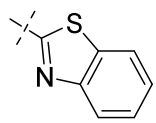
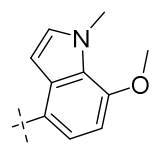
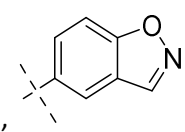
wherein R^1 is 

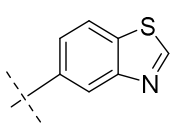


 ,  ,  ,  ,

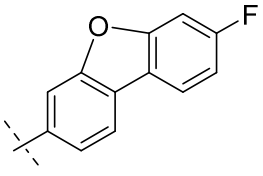
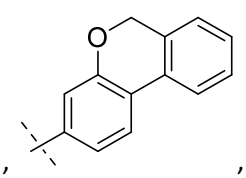
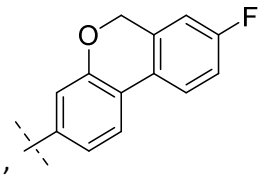
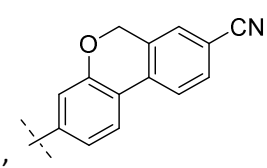
 ,  ,  ,  ,

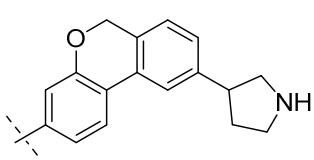
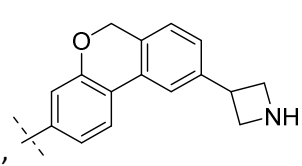
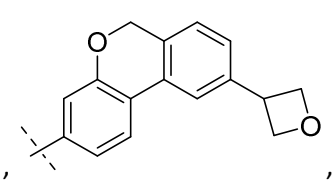
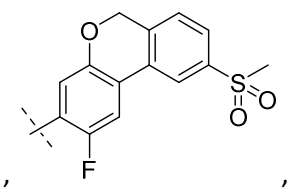
 ,  ,  ,  ,  ,

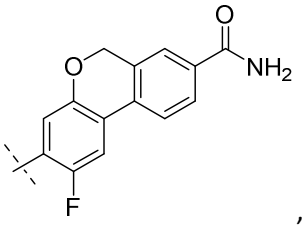
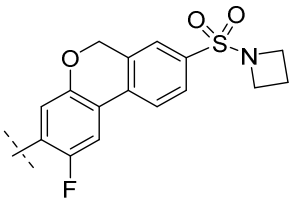
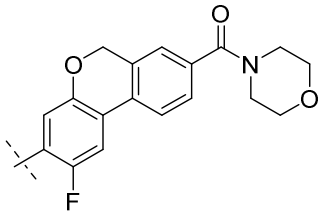
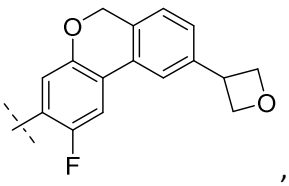
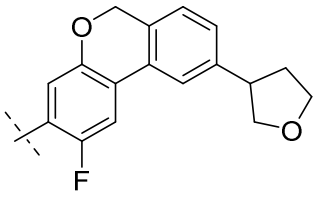
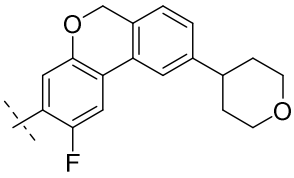
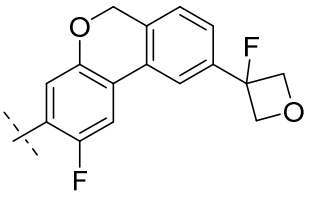
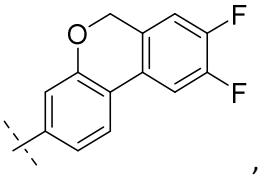
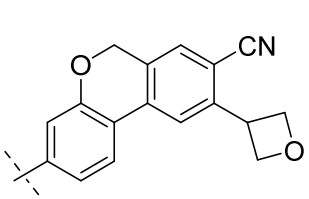
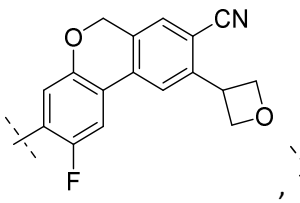
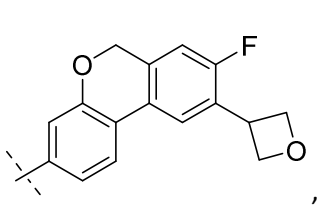
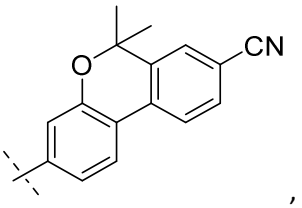
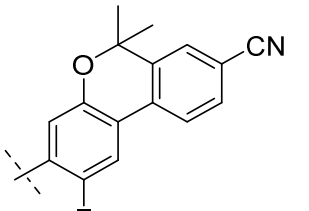
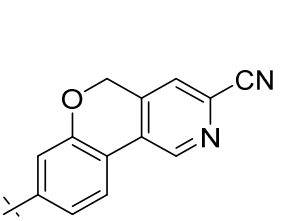
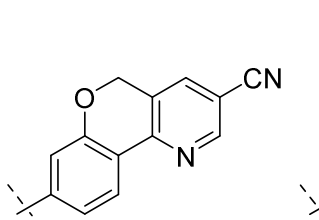
 ,  ,  ,  ,  ,  or

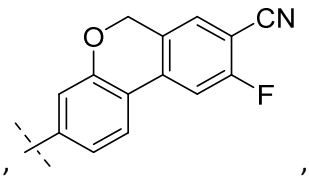
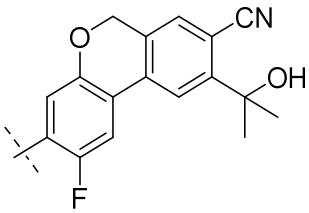
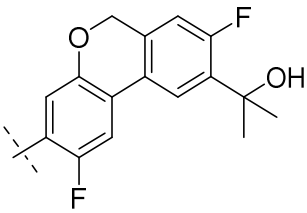
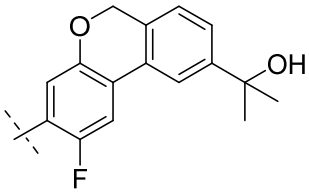
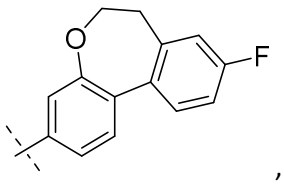
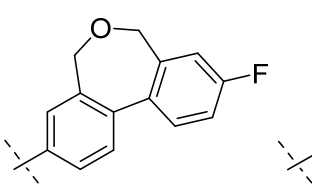
 , each of which is optionally substituted with 1-3 R^g group.

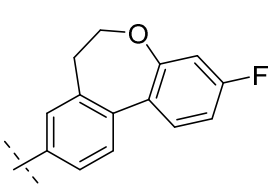
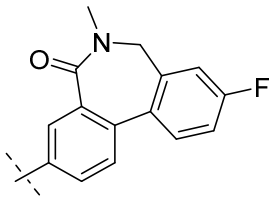
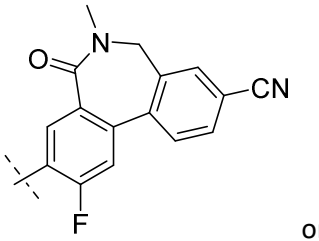
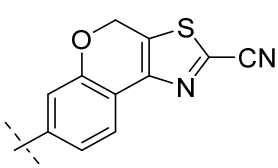
12. The compound of claim 1, or a pharmaceutically acceptable salt or deuterated form thereof,

wherein R^1 is  ,  ,  ,  ,

 ,  ,  ,  ,

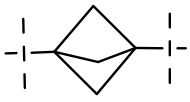
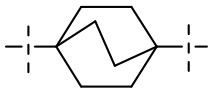
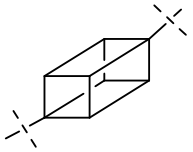
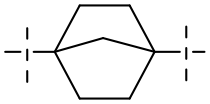
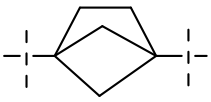
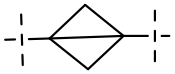
















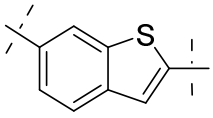
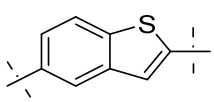
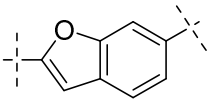
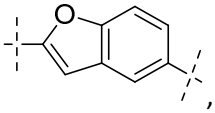
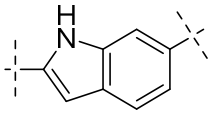
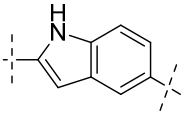
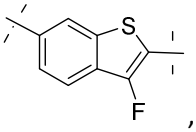
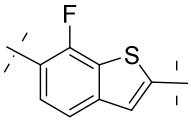
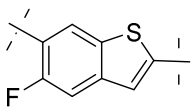
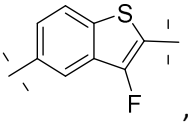
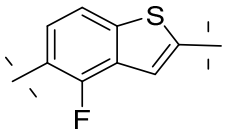
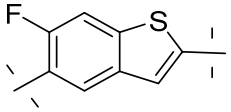
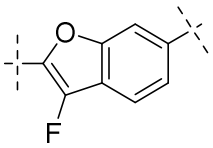
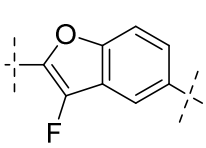
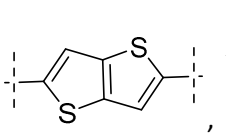
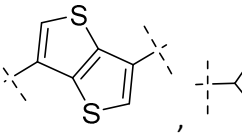
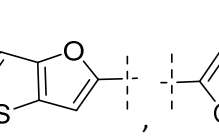
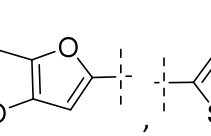
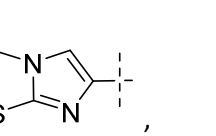
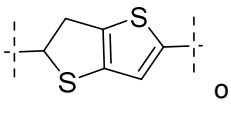
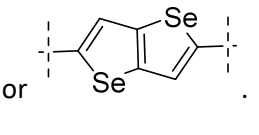
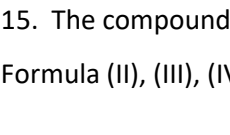
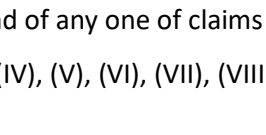







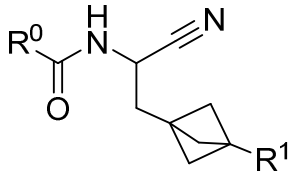
or

.

13. The compound of any one of claims 1-12, or a pharmaceutically acceptable salt or deuterated form thereof, wherein L is a polycyclic cycloalkylene selected from  ,  ,  ,  ,  or  .

14. The compound of any one of claims 1-13, or a pharmaceutically acceptable salt or deuterated form thereof, wherein L is  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  , ,  ,  ,  ,  ,  ,  ,  ,  , , ,  ,  or .

15. The compound of any one of claims 1-14, wherein the compound of Formula (I), is a compound of Formula (II), (III), (IV), (V), (VI), (VII), (VIII) or (IX):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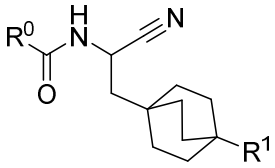
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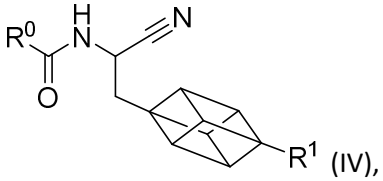
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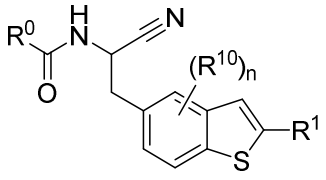
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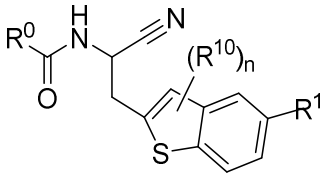
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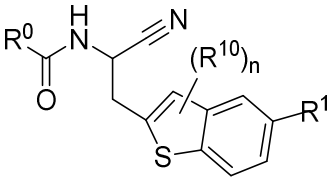
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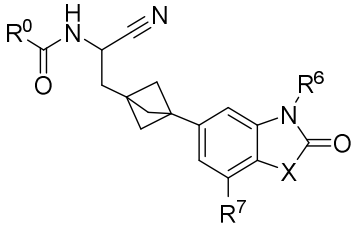
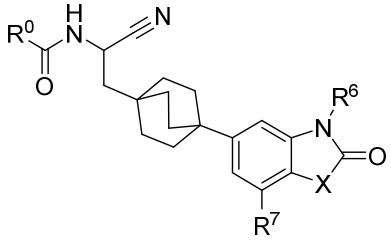
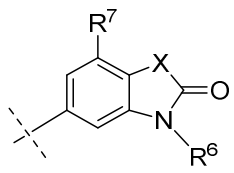

(VIII), or

(IX), or a pharmaceutically acceptable salt or deuterated form thereof, wherein R^0, R^1, R^6, R^7, R^{10} and n are defined as in claim 1.

16. The compound of any one of claims 1-15, or a pharmaceutically acceptable salt or deuterated form thereof, wherein

R^1 is

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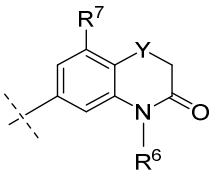
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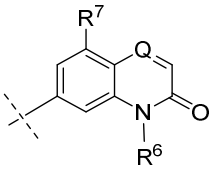
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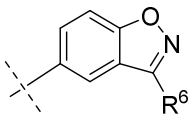
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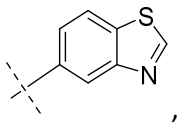
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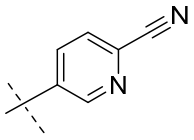
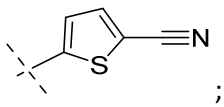

or

;

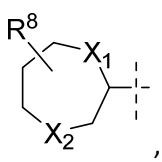
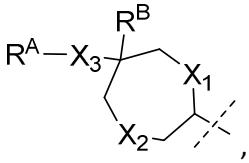
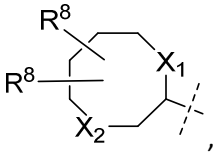
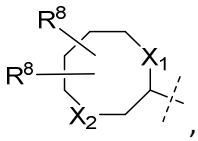
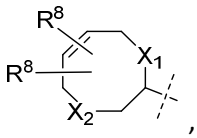
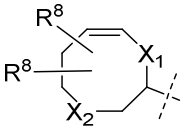
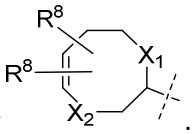
X is O, S or CF_2;

Y is O or S;

Q is CH or N;

R^6 is $C_{1\text{-}3}$alkyl, wherein said $C_{1\text{-}3}$alkyl is optionally substituted by 1, 2 or 3 F, OH, OC_1-3alkyl, $N(C_{1\text{-}3}alkyl)_2$, cyclopropyl, or tetrahydropyran; and

R^7 is H, F, Cl or CH_3.

17. The compound of any one of claims 1-16, or a pharmaceutically acceptable salt or deuterated form thereof, wherein R^0 is  ,  ,  ,  ,  ,  , or  .

18. The compound of claim 1, or a pharmaceutically acceptable salt or deuterated form thereof, wherein the compound is selected from Table 1.

19. Use of a compound of any one of claims 1-18, or a pharmaceutically acceptable salt or deuterated form thereof, in the manufacture of a medicament for the treatment of a disease, wherein the disease is asthma, chronic obstructive pulmonary disease (COPD), bronchitis, emphysema, cystic fibrosis (CF), bronchiectasis, sarcoidosis, alpha-1 antitrypsin (A1AT) deficiency, farmer's lung and related diseases, hypersensitivity pneumonitis, lung fibrosis, complications of lung transplantation, vasculitic and thrombotic disorders of the lung vasculature, pulmonary hypertension, antitussive activity including treatment of chronic cough associated with inflammatory and secretory conditions of the airways, iatrogenic cough, acute and chronic rhinitis including rhinitis medicamentosa, and vasomotor rhinitis; perennial and seasonal allergic rhinitis including rhinitis nervosa (hay fever), nasal polyposis; acute viral infection including the common cold, and infection due to a respiratory virus, acute lung injury, acute respiratory distress syndrome (ARDS), chronic rhinosinusitis (CRS), hidradenitis suppurativa (HS), rheumatoid arthritis (RA), inflammatory bowel disease (IBD), anti-neutrophil cytoplasmic antibody (ANCA) associated vasculitis, heart failure, giant cell arteritis, polyarteritis nodosa, anti-GBM disease (Goodpasture's), systemic scleroderma, diabetic nephropathy, diabetic neuropathy, diabetic retinopathy, diabetic ulcers, Duchenne muscular dystrophy, bronchiolitis obliterans, atopic dermatitis, pyoderma gangrenosum, sweet's syndrome, dermatomyositis/polymyositis, neutrophilic dermatoses, thrombosis, bronchopulmonary dysplasia, amyotrophic lateral sclerosis, sickle cell anemia, psoriasis, or a ventilator-induced lung injury.

20. A compound of claims 1-18, or a pharmaceutically acceptable salt or deuterated form thereof, for use as a medicament.