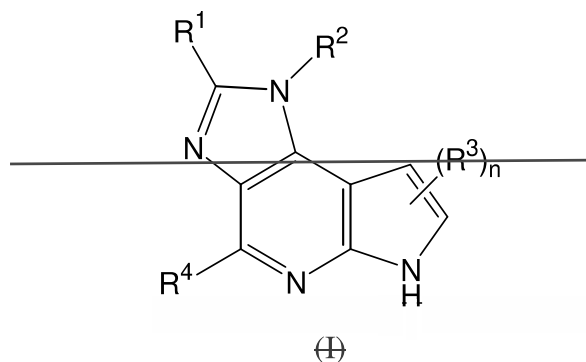


What is claimed is:

CLAIMS

1. ~~A compound having the structural formula (I):~~



wherein

R^1 is selected from hydrogen, C_1 - C_6 unsubstituted or substituted alkyl, OR' , $COOR'$ and $CONR'R''$;

R^2 is selected from C_3 - C_{10} cycloalkyl, bicycloalkyl, spirocyclic or bridged cycloalkyl, substituted with $NR'C(=O)R^x$, $NR'C(=O)OR^x$, $NR'C(=O)NR^xR^y$, $C(=O)NR^xR^y$, $NR'SO_2R^x$, $NR'SO_2NR^xR^y$, $CR'R''SO_2R^x$ or $CR'R''SO_2NR^xR^y$;

each R^3 is independently selected from hydrogen, C_1 - C_6 unsubstituted or substituted alkyl, OR' , $COOR'$ and $CONR'R''$;

R^4 is a group selected from hydrogen, halogen, CN, C_1 - C_6 unsubstituted or substituted alkyl, OR' , and NHR' ;

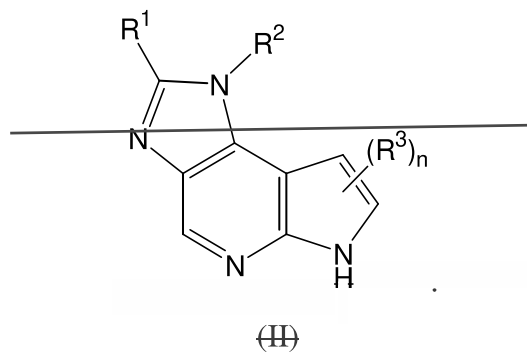
each of R^x and R^y is independently selected from H, alkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl and R^x and R^y may together form a 3 to 7 membered ring, and each of R^x and R^y is optionally substituted with one or more of halogen, CN, OR' , $NR'R''$, alkyl, haloalkyl, cyanoalkyl, hydroxyalkyl and alkoxyalkyl;

each of R' and R'' is independently selected from hydrogen and C_1 - C_6 unsubstituted and substituted alkyl and R' and R'' may together form a 3 to 7 membered ring; and

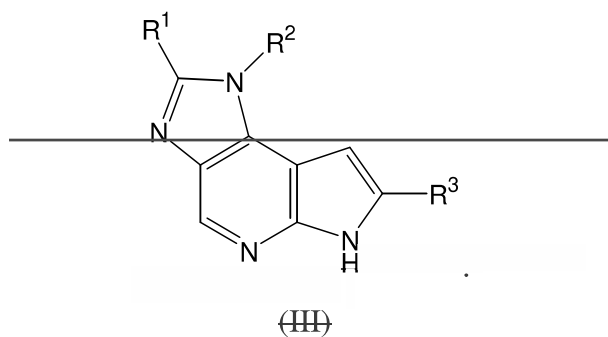
n is 1 or 2,

or a pharmaceutically acceptable form or an isotope derivative thereof.

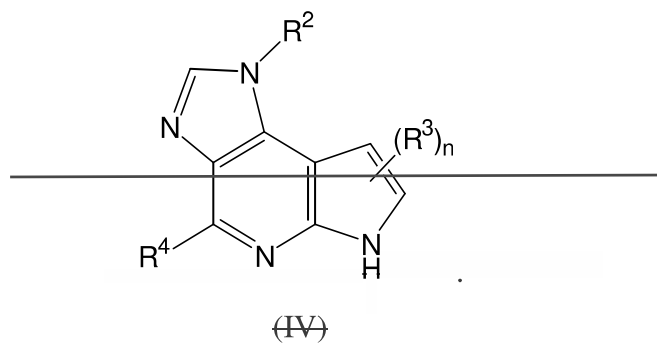
2. ~~The compound of claim 1, wherein R^4 is H, having the structural formula (II):~~



3. ~~The compound of claim 2, wherein n is 1, having the structural formula (III):~~



4. ~~The compound of claim 1, wherein R^1 is H, having the structural formula (IV):~~



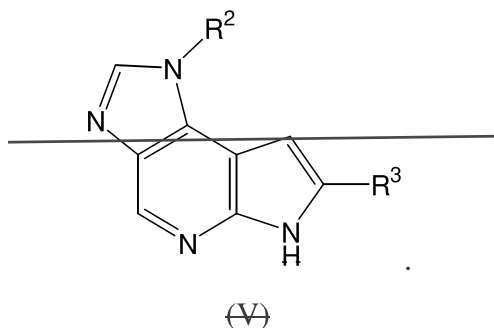
5. ~~The compound of any of claim 1-4, wherein both of R^1 and R^4 is H.~~

6. ~~The compound of any of claim 1-4, wherein R^1 is methyl and R^4 is H.~~

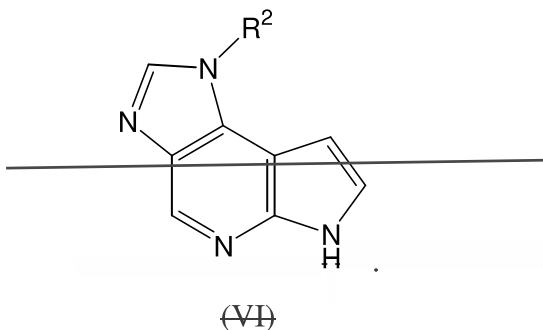
7. ~~The compound of any of claims 1, 2, and 4-6, wherein n is 1.~~

8. — The compound of claim 7, wherein R^3 is H.

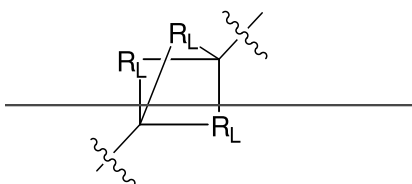
9. — The compound of claim 1, wherein R^1 is H, R^4 is H, n is 1, having the structural formula (V):



10. — The compound of claim 9, wherein R^3 is H, having the structural formula (VI):



11. — The compound of any of claims 1-10, wherein R_2 comprises:



wherein each R_L is independently $(CH_2)_m$ and m is independently 0, 1, 2 or 3, wherein when an m is 0, the respective bridge is absent; *provided that at least one m is not 0.*

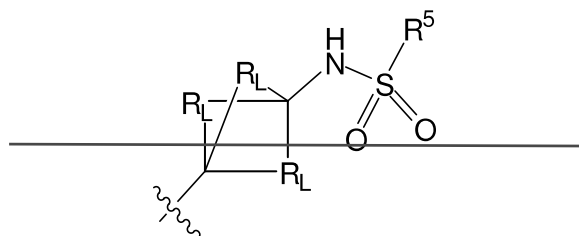
12. — The compound of claim 11, wherein not more than one R_L 's is absent.

13. — The compound of claim 11, wherein each m is independently 1, 2 or 3.

14. — The compound of claim 11, wherein each m is 1.

15. — The compound of claim 11, wherein each m is 2.

16. — The compound of any of claims 11–15, wherein R_2 comprises:



wherein R^5 is R^* or NR^*R^y , wherein each of R^* and R^y is independently selected from H, alkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl and R^* and R^y may together form a 3- to 7-membered ring, and each of R^* and R^y is optionally substituted with one or more of halogen, CN, OR', NR'R'', alkyl, haloalkyl, cyanoalkyl, hydroxyalkyl and alkoxyalkyl; *provided that* when R^5 is R^* , R^* is not H.

17. — The compound of claim 16, wherein R^5 is R^* .

18. — The compound of claim 17, wherein R^* is a linear or branched C_1 – C_6 alkyl.

19. — The compound of claim 18, wherein R^* is a linear or branched C_2 – C_4 alkyl.

20. — The compound of claim 17, wherein R^* is n-propyl or isopropyl.

21. — The compound of claim 16, wherein R^5 is NR^*R^y .

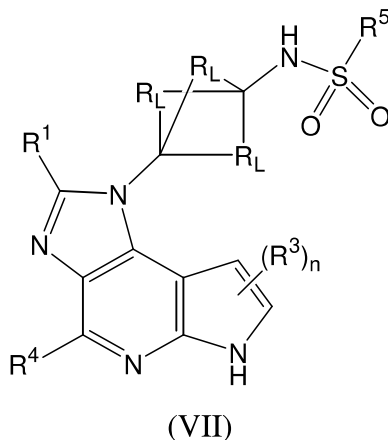
22. — The compound of claim 21, wherein one of R^* and R^y is H.

23. — The compound of claim 21, wherein the R^* and R^y together, along with the N in NR^*R^y , form a 3- to 5-membered heterocyclic group, optionally substituted with one or more of halogen, CN, OR', NR'R'', alkyl, haloalkyl, cyanoalkyl, hydroxyalkyl and alkoxyalkyl.

~~24. The compound of claim 23, wherein the heterocyclic group is a 4-membered heterocyclic group.~~

~~25. The compound of any one of claims 16-24, wherein each R_L is CH_2 .~~

26. A compound having the structural formula (VII):



wherein

R^1 is selected from hydrogen, C_1 - C_6 unsubstituted or substituted alkyl, OR' , $COOR'$ and $CONR'R''$;

each R^3 is independently selected from hydrogen, C_1 - C_6 unsubstituted or substituted alkyl, OR' , $COOR'$ and $CONR'R''$;

R^4 is a group selected from hydrogen, halogen, CN, C_1 - C_6 unsubstituted or substituted alkyl, OR' , and NHR' ;

R^5 is R^x or NR^xR^y , wherein each of R^x and R^y is independently selected from H, alkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl and R^x and R^y may together form a 3- to 7-membered ring, and each of R^x and R^y is optionally substituted with one or more of halogen, CN, OR' , $NR'R''$, alkyl, haloalkyl, cyanoalkyl, hydroxyalkyl and alkoxyalkyl; *provided that* when R^5 is R^x , R^x is not H;

each R_L is independently $(CH_2)_m$ and m is independently 0, 1, 2 or 3, wherein when m is 0, the respective bridge is absent; *provided that* at least one m is not 0.

each R' and R'' is independently selected from hydrogen and C_1 - C_6 unsubstituted and

~~substituted alkyl and R' and R'' may together form a 3- to 7-membered ring; and~~

~~n is 1 or 2,~~

~~or a pharmaceutically acceptable form or an isotope derivative~~salt thereof.

~~27. The compound of claim 26, wherein not more than one R_L 's is absent.~~

~~28. The compound of claim 26, wherein each m is independently 1, 2 or 3.~~

~~29. The compound of claim 26, wherein each m is 1.~~

~~30. The compound of claim 26, wherein each m is 2.~~

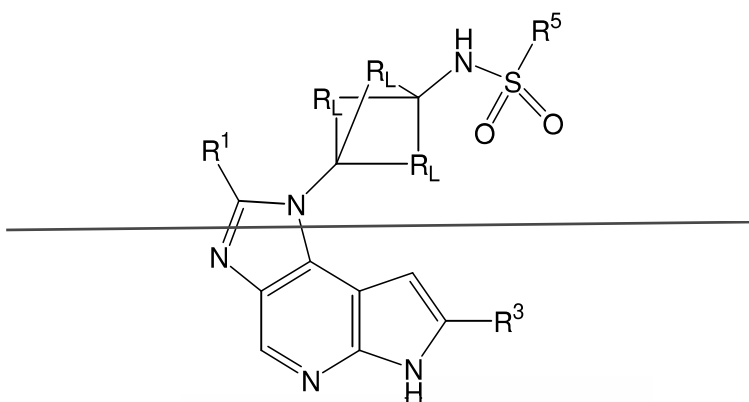
~~31. The compound of any of claims 26-30~~of claim 1, wherein R^4 is H.

~~32. The compound of any of claims 26-32~~claim 1 or 2, wherein R^1 is H.

~~33. The compound of any of claims 26-32, wherein R^1 is methyl.~~

~~34. The compound of any of claims 26-33, wherein n is 1.~~

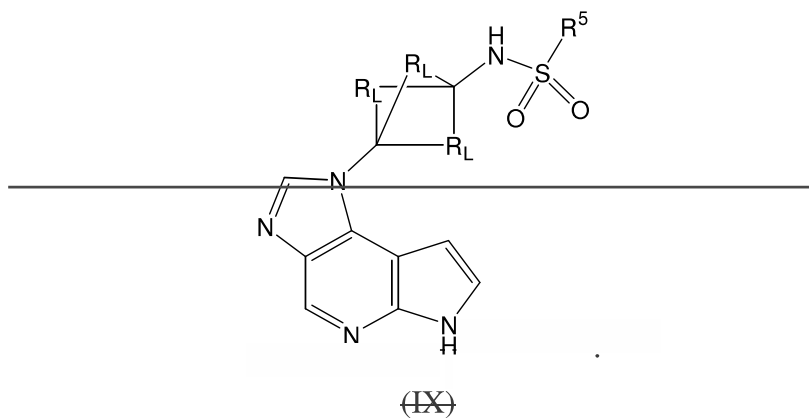
~~35. The compound of claim 31 or 34, wherein R^4 is H and n is 1, having the structural formula (VIII):~~



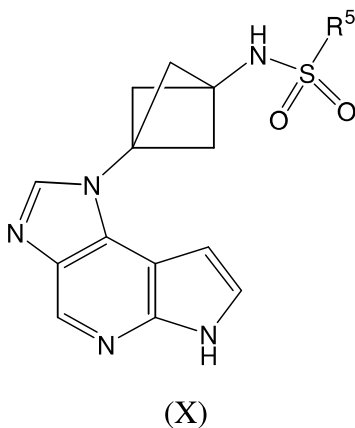
(VIII)

~~36. The compound of claim 35, wherein R^1 is methyl and R^3 is H.~~

~~37. The compound of claim 35, wherein both R^1 and R^3 is H, having the structural formula (IX):~~



~~384. The compound of claim 371, wherein each R_L is CH_2 , having the structural formula (X):~~



~~395. The compound of any of claims 26-381-4, wherein R^5 is R^x .~~

~~406. The compound of claim 395, wherein R^x is a linear or branched C_1 - C_6 alkyl.~~

~~417. The compound of claim 396, wherein R^x is a linear or branched C_2 - C_4 alkyl.~~

~~428. The compound of claim 397, wherein R^x is n-propyl or isopropyl.~~

439. The compound of any of claims ~~26-38~~1-4, wherein R^5 is NR^xR^y .

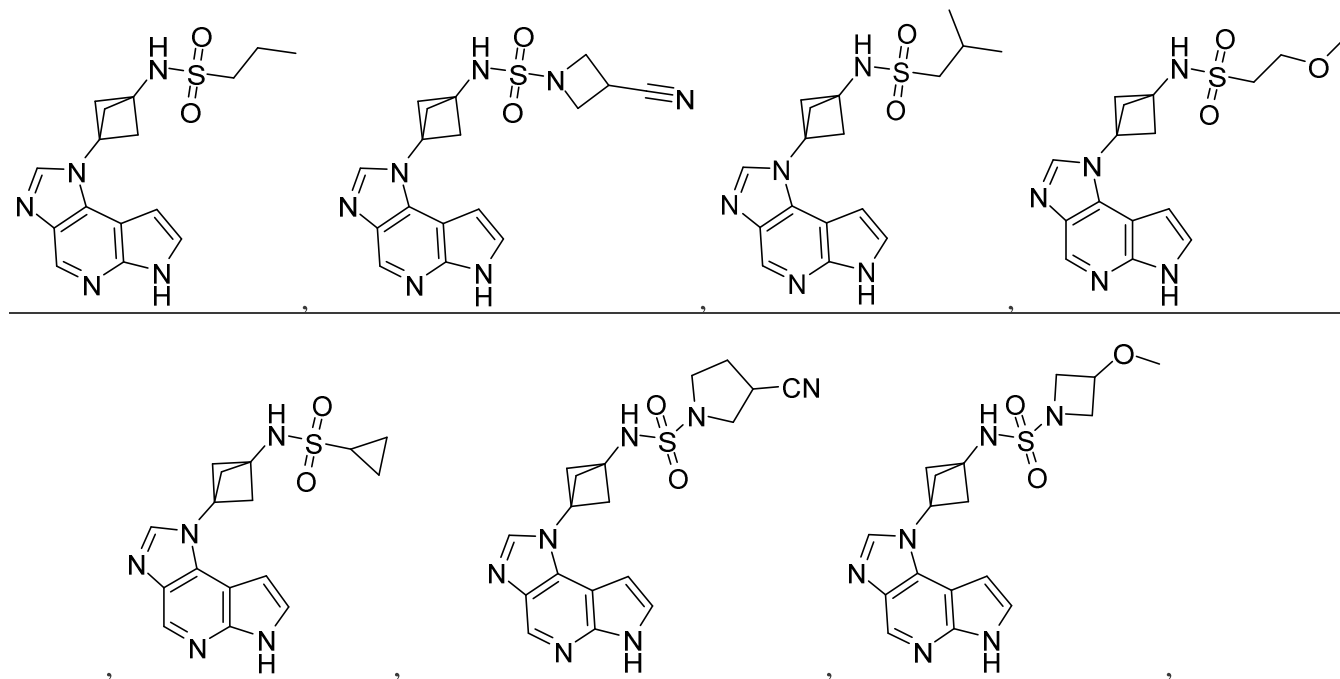
4410. The compound of claim ~~43~~9, wherein one of R^x and R^y is H.

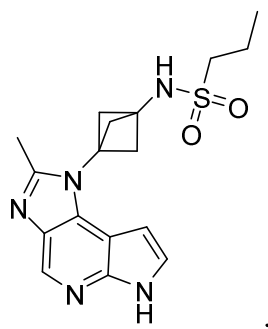
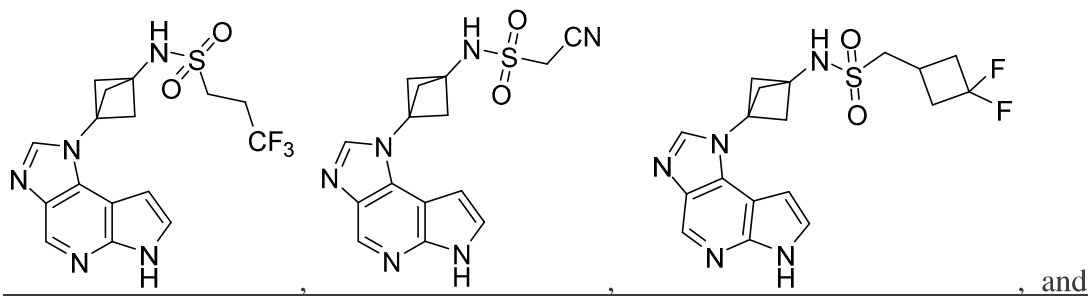
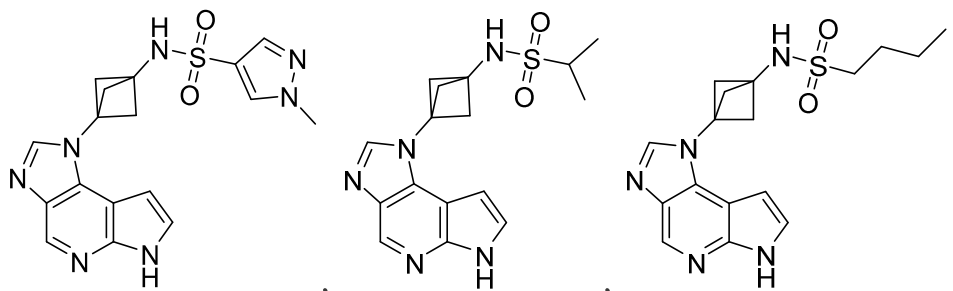
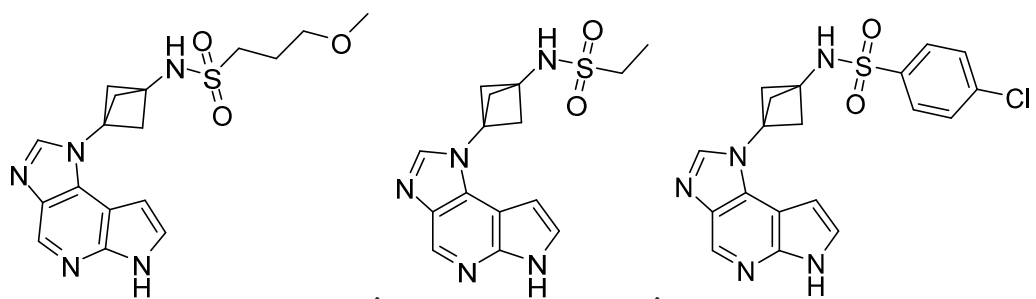
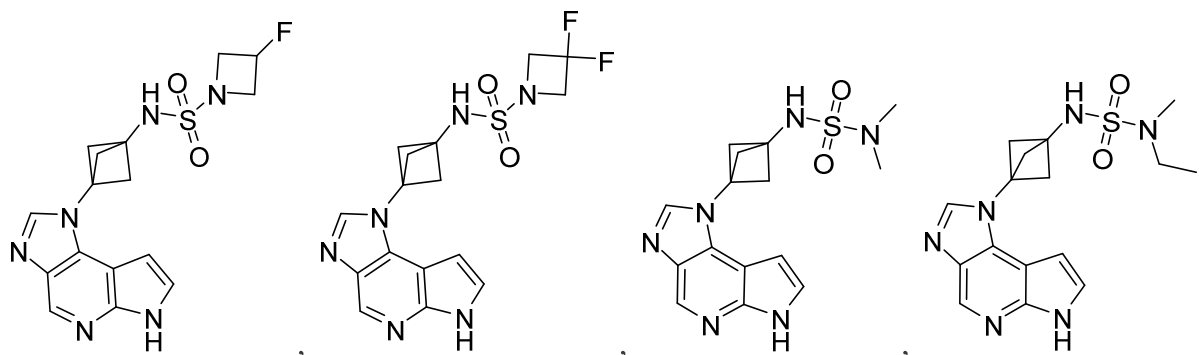
4511. The compound of claim ~~43~~9, wherein the R^x and R^y together, along with the N in NR^xR^y , form a 3- to 5-membered heterocyclic group, optionally substituted with one or more of halogen, CN, OR' , $NR'R''$, alkyl, haloalkyl, cyanoalkyl, hydroxyalkyl and alkoxyalkyl.

4612. The compound of claim ~~45~~11, wherein the heterocyclic group is a 4-membered heterocyclic group.

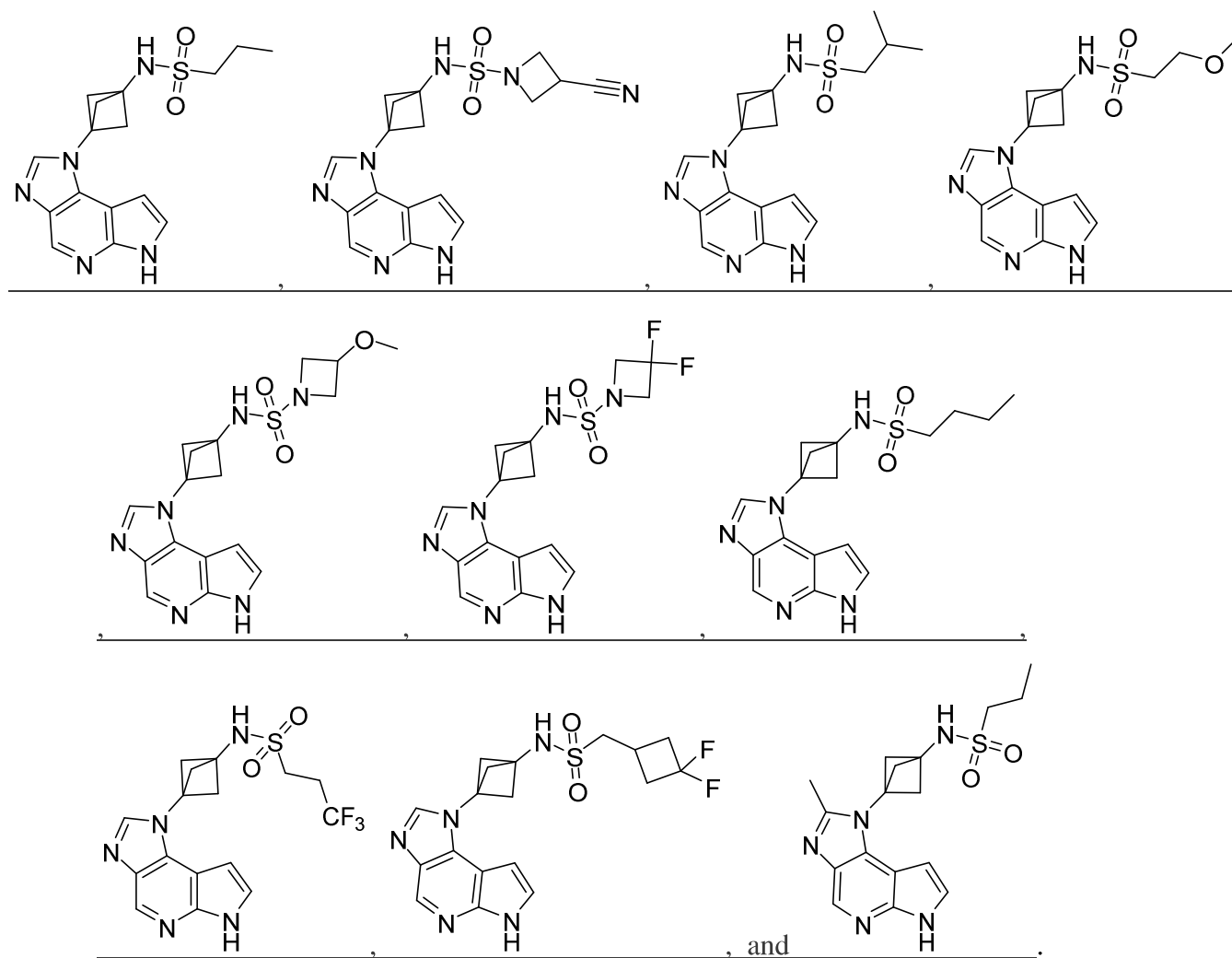
~~47. The compound of claim 37, wherein each R_L is $(CH_2)_2$.~~

4813. The compound of any of claims 1-~~47~~12, selected from the group consisting of:
selected from **Table 1**





4914. The compound of claim 4813, selected from **Table 1A**

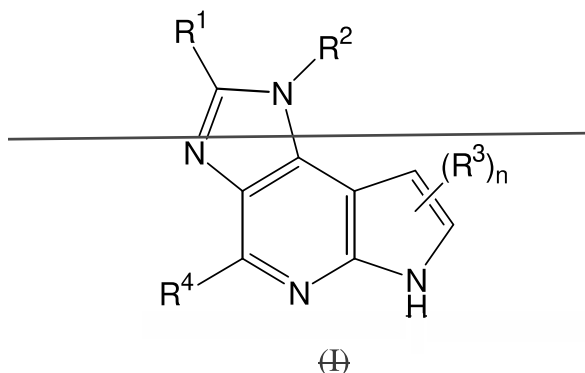


50. ~~The compound of any of claims 1-49, having one or more deuterium atoms in place of hydrogen.~~

51. ~~The compound of claim 50, having one hydrogen replaced with a deuterium atom.~~

5215. A pharmaceutical composition comprising a compound according to any of claims 1-511-14, effective to treat or reduce one or more diseases or disorders, in a mammal, including a human, and a pharmaceutically acceptable excipient, carrier, or diluent.

53. ~~A pharmaceutical composition comprising a compound having the structural formula (I):~~



wherein

R^1 is selected from hydrogen, C_1 - C_6 unsubstituted or substituted alkyl, OR' , $COOR'$ and $CONR'R''$;

R^2 is selected from C_3 - C_{10} cycloalkyl, bicycloalkyl, spirocyclic or bridged cycloalkyl, substituted with $NR'C(=O)R^x$, $NR'C(=O)OR^x$, $NR'C(=O)NR^xR^y$, $C(=O)NR^xR^y$, $NR'SO_2R^x$, $NR'SO_2NR^xR^y$, $CR'R''SO_2R^x$ or $CR'R''SO_2NR^xR^y$;

each R^3 is independently selected from hydrogen, C_1 - C_6 unsubstituted or substituted alkyl, OR' , $COOR'$ and $CONR'R''$;

R^4 is a group selected from hydrogen, halogen, CN, C_1 - C_6 unsubstituted or substituted alkyl, OR' , and NHR' ;

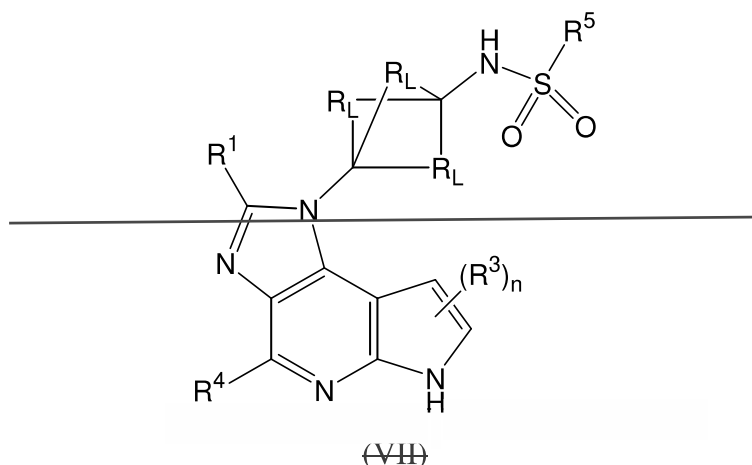
each of R^x and R^y is independently selected from H, alkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl and R^x and R^y may together form a 3- to 7-membered ring, and each of R^x and R^y is optionally substituted with one or more of halogen, CN, OR' , $NR'R''$, alkyl, haloalkyl, cyanoalkyl, hydroxyalkyl and alkoxyalkyl;

each of R' and R'' is independently selected from hydrogen and C_1 - C_6 unsubstituted and substituted alkyl and R' and R'' may together form a 3- to 7-membered ring; and

n is 1 or 2;

or a pharmaceutically acceptable form or an isotope derivative thereof, and a pharmaceutically acceptable excipient, carrier, or diluent.

54. — A pharmaceutical composition comprising a compound having the structural formula (VII):



wherein

R^1 is selected from hydrogen, C_1 - C_6 unsubstituted or substituted alkyl, OR' , $COOR'$ and $CONR'R''$;

each R^3 is independently selected from hydrogen, C_1 - C_6 unsubstituted or substituted alkyl, OR' , $COOR'$ and $CONR'R''$;

R^4 is a group selected from hydrogen, halogen, CN, C_1 - C_6 unsubstituted or substituted alkyl, OR' , and NHR' ;

R^5 is R^x or NR^xR^y , wherein each of R^x and R^y is independently selected from H, alkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl and R^x and R^y may together form a 3- to 7-membered ring, and each of R^x and R^y is optionally substituted with one or more of halogen, CN, OR' , $NR'R''$, alkyl, haloalkyl, cyanoalkyl, hydroxyalkyl and alkoxyalkyl; *provided that* when R^5 is R^x , R^x is not H;

each R_L is independently $(CH_2)_m$ and m is independently 0, 1, 2 or 3, wherein when m is 0, the respective bridge is absent;

each R' and R'' is independently selected from hydrogen and C_1 - C_6 unsubstituted and substituted alkyl and R' and R'' may together form a 3- to 7-membered ring; and

n is 1 or 2,

or a pharmaceutically acceptable form or an isotope derivative thereof, and a pharmaceutically acceptable excipient, carrier, or diluent.

5516. The pharmaceutical composition of any of claims 52-54claim 15, being wherein the composition is suitable for oral administration.

17. A unit dosage form comprising a pharmaceutical composition according to claim 15 or 16.

18. The unit dosage form of claim 17, wherein the dosage form is a tablet or a capsule.

5619. The pharmaceutical composition of any of claims 52-55A pharmaceutical composition comprising a compound according to any one of claims 1-14 for treating, being useful to treat or reduce one or more of cancer or inflammatory diseases, or immune-mediated diseases or disorders selected from asthma, allergies, arthritis, juvenile arthritis, inflammatory bowel diseases, endocrinopathies, neurodegenerative diseases, autistic spectrum disorder, depression, Alzheimer's disease, Guillain-Barre syndrome, obsessive-compulsive disorder, optic neuritis, retinal degeneration, dry eye syndrome (DES), Sjogren's syndrome, amyotrophic lateral sclerosis (ALS), Parkinson's disease, Huntington's Disease, Guillain-Barre syndrome, myasthenia gravis, and chronic idiopathic demyelinating disease (CID), vascular diseases, skin diseases, Hashimoto's thyroiditis, pernicious anemia, Cushing's disease, Addison's disease, chronic active hepatitis, polycystic ovary syndrome (PCOS), celiac disease, pemphigus, transplant rejection and graft-versus-host disease (GVDH) and cancer, or a related disease or disorder.

57. The pharmaceutical composition of claim 56, wherein being useful to treat or reduce one or more autoimmune diseases, or a related disease or disorder.

58. The pharmaceutical composition of claim 56, wherein the disease or disorder is selected from: asthma, allergies, arthritis (e.g., rheumatoid arthritis, psoriatic arthritis, and ankylosing spondylitis), juvenile arthritis, inflammatory bowel diseases (e.g., ulcerative colitis and Crohn's disease), endocrinopathies (e.g., type 1 diabetes and Graves' disease), neurodegenerative diseases (e.g., multiple sclerosis (MS)), autistic spectrum disorder, depression, Alzheimer's disease, Guillain-Barre syndrome, obsessive-compulsive disorder, optic neuritis, retinal degeneration, dry eye syndrome DES, Sjogren's syndrome, amyotrophic lateral sclerosis (ALS), Parkinson's disease, Huntington's Disease, Guillain-Barre syndrome, myasthenia gravis, and chronic idiopathic demyelinating disease (CID), vascular diseases (e.g., autoimmune hearing loss, systemic vasculitis, and atherosclerosis), skin diseases (e.g., acne vulgaris dermatomyositis,

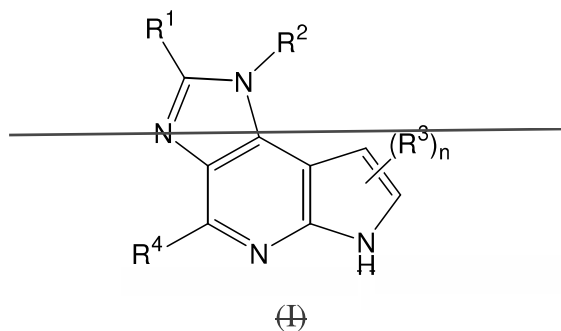
~~pemphigus, systemic lupus erythematosus (SLE), discoid lupus erythematosus, scleroderma, psoriasis, plaque psoriasis, vasculitis, vitiligo and alopecia), Hashimoto's thyroiditis, pernicious anemia, Cushing's disease, Addison's disease, chronic active hepatitis, polycystic ovary syndrome (PCOS), celiac disease, pemphigus, transplant rejection (allograft transplant rejection), graft-versus-host disease (GVHD), or a related disease or disorder thereof.~~

20. A pharmaceutical composition comprising a compound according to any one of claims 1-14 for treating one or more of cancer or inflammatory or immune-mediated diseases or disorders selected from: asthma, allergies, rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis, juvenile arthritis, ulcerative colitis, Crohn's disease, type 1 diabetes, Graves' disease, multiple sclerosis (MS), autistic spectrum disorder, depression, Alzheimer's disease, Guillain-Barre syndrome, obsessive-compulsive disorder, optic neuritis, retinal degeneration, dry eye syndrome (DES), Sjogren's syndrome, amyotrophic lateral sclerosis (ALS), Parkinson's disease, Huntington's Disease, Guillain-Barre syndrome, myasthenia gravis, chronic idiopathic demyelinating disease (CID), autoimmune hearing loss, systemic vasculitis, atherosclerosis, acne vulgaris, dermatomyositis, pemphigus, systemic lupus erythematosus (SLE), discoid lupus erythematosus, scleroderma, psoriasis, plaque psoriasis, vasculitis, vitiligo, alopecia, Hashimoto's thyroiditis, pernicious anemia, Cushing's disease, Addison's disease, chronic active hepatitis, polycystic ovary syndrome (PCOS), celiac disease, allograft transplant rejection and graft-versus-host disease (GVHD).
21. The pharmaceutical composition of claim 19, wherein the composition is for treating one or more disease or disorder selected from: asthma, allergies, arthritis, juvenile arthritis, inflammatory bowel diseases, endocrinopathies, neurodegenerative diseases, autistic spectrum disorder, depression, Alzheimer's disease, Guillain-Barre syndrome, obsessive-compulsive disorder, optic neuritis, retinal degeneration, dry eye syndrome (DES), Sjogren's syndrome, amyotrophic lateral sclerosis (ALS), Parkinson's disease, Huntington's Disease, Guillain-Barre syndrome, myasthenia gravis, and chronic idiopathic demyelinating disease (CID), vascular diseases, skin diseases, Hashimoto's thyroiditis, pernicious anemia, Cushing's disease, Addison's disease, chronic active hepatitis, polycystic ovary syndrome (PCOS), celiac disease, pemphigus, transplant rejection, graft-versus-host disease (GVHD), or a related disease or disorder thereof.
59. ~~— A unit dosage form comprising a pharmaceutical composition according to any of claims 52-58.~~

60. — ~~The unit dosage form of claim 59, being a tablet or a capsule.~~

22. The pharmaceutical composition of claim 20, wherein the composition is for treating one or more disease or disorder selected from: asthma, allergies, rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis, juvenile arthritis, ulcerative colitis, Crohn's disease, type 1 diabetes, Graves' disease, multiple sclerosis (MS), autistic spectrum disorder, depression, Alzheimer's disease, Guillain-Barre syndrome, obsessive-compulsive disorder, optic neuritis, retinal degeneration, dry eye syndrome (DES), Sjogren's syndrome, amyotrophic lateral sclerosis (ALS), Parkinson's disease, Huntington's Disease, Guillain-Barre syndrome, myasthenia gravis, chronic idiopathic demyelinating disease (CID), autoimmune hearing loss, systemic vasculitis, atherosclerosis, acne vulgaris, dermatomyositis, pemphigus, systemic lupus erythematosus (SLE), discoid lupus erythematosus, scleroderma, psoriasis, plaque psoriasis, vasculitis, vitiligo, alopecias, Hashimoto's thyroiditis, pernicious anemia, Cushing's disease, Addison's disease, chronic active hepatitis, polycystic ovary syndrome (PCOS), celiac disease, allograft transplant rejection, graft-versus-host disease (GVHD), or a related disease or disorder thereof.

61. — ~~A method for treating or reducing a disease or disorder, comprising administering to a subject in need thereof a pharmaceutical composition comprising a compound having the structural formula (I):~~



wherein

R^1 is selected from hydrogen, C_1 - C_6 unsubstituted or substituted alkyl, OR' , $COOR'$ and $CONR'R''$;

R^2 is selected from C_3 - C_{10} cycloalkyl, bicycloalkyl, spirocyclic or bridged cycloalkyl, substituted with $NR'C(=O)R^*$, $NR'C(=O)OR^*$, $NR'C(=O)NR^*R^y$, $C(=O)NR^*R^y$, $NR'SO_2R^*$;

~~NR'SO₂NR^xR^y, CR'R''SO₂R^x or CR'R''SO₂NR^xR^y;~~

~~each R³ is independently selected from hydrogen, C₁-C₆ unsubstituted or substituted alkyl, OR', COOR' and CONR'R'';~~

~~R⁴ is a group selected from hydrogen, halogen, CN, C₁-C₆ unsubstituted or substituted alkyl, OR', and NHR';~~

~~each of R^x and R^y is independently selected from H, alkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl and R^x and R^y may together form a 3 to 7 membered ring, and each of R^x and R^y is optionally substituted with one or more of halogen, CN, OR', NR'R'', alkyl, haloalkyl, cyanoalkyl, hydroxyalkyl and alkoxyalkyl;~~

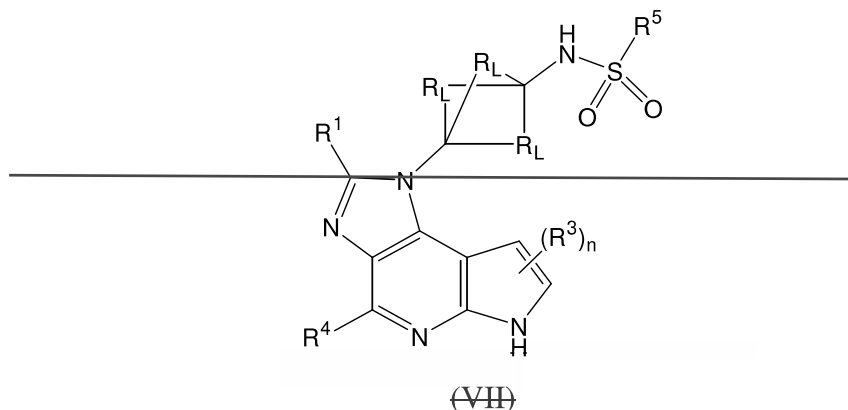
~~each of R' and R'' is independently selected from hydrogen and C₁-C₆ unsubstituted and substituted alkyl and R' and R'' may together form a 3 to 7 membered ring; and~~

~~n is 1 or 2,~~

~~or a pharmaceutically acceptable form or an isotope derivative thereof, effective to treat or reduce one or more of inflammatory diseases, immune mediated diseases and cancer, or a related disease or disorder, in a mammal, including a human.~~

62. — A method for treating or reducing a disease or disorder, comprising

~~administering to a subject in need thereof a pharmaceutical composition comprising a compound having the structural formula (VII):~~



wherein

~~R¹ is selected from hydrogen, C₁-C₆ unsubstituted or substituted alkyl, OR', COOR' and CONR'R'';~~

~~each R³ is independently selected from hydrogen, C₁-C₆ unsubstituted or substituted~~

alkyl, OR', COOR' and CONR'R'';

R⁴ is a group selected from hydrogen, halogen, CN, C₁-C₆-unsubstituted or substituted alkyl, OR', and NHR';

R⁵ is R^x or NR^xR^y, wherein each of R^x and R^y is independently selected from H, alkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl and R^x and R^y may together form a 3- to 7-membered ring, and each of R^x and R^y is optionally substituted with one or more of halogen, CN, OR', NR'R'', alkyl, haloalkyl, cyanoalkyl, hydroxyalkyl and alkoxyalkyl; *provided that* when R⁵ is R^x, R^x is not H;

each R_L is independently (CH₂)_m and *m* is independently 0, 1, 2 or 3, wherein when *m* is 0, the respective bridge is absent;

each R' and R'' is independently selected from hydrogen and C₁-C₆-unsubstituted and substituted alkyl and R' and R'' may together form a 3- to 7-membered ring; and

n is 1 or 2,

or a pharmaceutically acceptable form or an isotope derivative thereof, and a pharmaceutically acceptable excipient, carrier, or diluent, effective to treat or reduce one or more of inflammatory diseases, immune-mediated diseases and cancer, or a related disease or disorder, in a mammal, including a human.

63. — A method for treating or reducing a disease or disorder, comprising administering to a subject in need thereof a pharmaceutical composition comprising a compound of any of claims 1-51, wherein the disease or disorder is one or more of inflammatory diseases, immune-mediated diseases and cancer, or a related disease or disorder.

64. — The method of claim 61-63, wherein the disease or disorder is selected from: asthma, allergies, arthritis (*e.g.*, rheumatoid arthritis, psoriatic arthritis, and ankylosing spondylitis), juvenile arthritis, inflammatory bowel diseases (*e.g.*, ulcerative colitis and Crohn's disease), endocrinopathies (*e.g.*, type 1 diabetes and Graves' disease), neurodegenerative diseases (*e.g.*, multiple sclerosis (MS)), autistic spectrum disorder, depression, Alzheimer's disease, Guillain Barre syndrome, obsessive compulsive disorder, optic neuritis, retinal degeneration, dry eye syndrome DES, Sjogren's syndrome, amyotrophic lateral sclerosis (ALS), Parkinson's disease, Huntington's Disease, Guillain Barre syndrome, myasthenia gravis, and chronic idiopathic demyelinating disease (CID), vascular diseases (*e.g.*, autoimmune hearing

loss, systemic vasculitis, and atherosclerosis), skin diseases (*e.g.*, ~~acne vulgaris dermatomyositis, pemphigus, systemic lupus erythematosus (SLE), discoid lupus erythematosus, scleroderma, psoriasis, plaque psoriasis, vasculitis, vitiligo and alopecia~~), Hashimoto's thyroiditis, pernicious anemia, Cushing's disease, Addison's disease, chronic active hepatitis, polycystic ovary syndrome (PCOS), celiac disease, pemphigus, transplant rejection (allograft transplant rejection), graft-versus-host disease (GVHD), or a related disease or disorder thereof.

65. — The method of any of claims 61-64, wherein the disease or disorder is an inflammatory disease.

66. — The method of claim 65, wherein the disease or disorder is an autoimmune disease.

67. — The method of any of claims 61-64, wherein the disease or disorder is an immune-mediated disease.

68.23. The method of any of claims 61-64 pharmaceutical composition of claim 19, wherein the disease or disorder composition is for treating is cancer.

69.24. The method of any of claims 61-64 pharmaceutical composition of claim 20, wherein the disease or disorder is one or more of rheumatoid arthritis, ankylosing spondylitis, psoriasis, atopic dermatitis, inflammatory bowel disease, Crohn's, ulcerative colitis, DES, vitiligo, alopecia areata, and alopecia totalis.

70. — Use of a compound of any of claims 1-51, and a pharmaceutically acceptable excipient, carrier, or diluent, in preparation of a medicament for treating a disease or disorder.

71. — The use of claim 70, wherein the disease or disorder is one or more of inflammatory diseases, immune-mediated diseases and cancer.

72. — The use of claim 71, wherein the disease or disorder is an autoimmune disease.

73. — The use of claim 71, wherein the disease or disorder is selected from: asthma, allergies, arthritis (*e.g.*, rheumatoid arthritis, psoriatic arthritis, and ankylosing spondylitis), juvenile arthritis,

~~inflammatory bowel diseases (e.g., ulcerative colitis and Crohn's disease), endocrinopathies (e.g., type 1 diabetes and Graves' disease), neurodegenerative diseases (e.g., multiple sclerosis (MS)), autistic spectrum disorder, depression, Alzheimer's disease, Guillain Barre syndrome, obsessive compulsive disorder, optic neuritis, retinal degeneration, dry eye syndrome DES, Sjogren's syndrome, amyotrophic lateral sclerosis (ALS), Parkinson's disease, Huntington's Disease, Guillain-Barre syndrome, myasthenia gravis, and chronic idiopathic demyelinating disease (CID), vascular diseases (e.g., autoimmune hearing loss, systemic vasculitis, and atherosclerosis), skin diseases (e.g., acne vulgaris dermatomyositis, pemphigus, systemic lupus erythematosus (SLE), discoid lupus erythematosus, scleroderma, psoriasis, plaque psoriasis, vasculitis, vitiligo and alopecias), Hashimoto's thyroiditis, pernicious anemia, Cushing's disease, Addison's disease, chronic active hepatitis, polycystic ovary syndrome (PCOS), celiac disease, pemphigus, transplant rejection (allograft transplant rejection), graft-versus-host disease (GVHD), or a related disease or disorder thereof.~~

~~74. — The use of any of claims 70-73, wherein the disease or disorder is one or more of rheumatoid arthritis, ankylosing spondylitis, psoriasis, atopic dermatitis, inflammatory bowel disease, Crohn's, ulcerative colitis, DES, vitiligo, alopecia areata, alopecia totalis.~~

~~75. — The use of any of claims 70-74, wherein the medicament is oral administration.~~

~~76. — The use of any of claims 70-74, wherein the medicament is topical administration.~~