cycloalkenyloxy, heterocycloalkyloxy, and heterocycloalkenyloxy, each optionally substituted; and

each R^{22} is independently selected from the group consisting of amino, C_{1-8} alkyl, C_{2-8} alkenyl, C_{2-8} alkynyl, C_{1-8} haloalkyl, aryl, heteroaryl, C_{3-8} cycloalkyl, cycloalkenyl, heterocycloalkyl, heterocycloalkenyl, C_{1-8} alkoxy, C_{1-8} haloalkoxy, alkenyloxy, alkynyloxy, aryloxy, heteroaryloxy, C_{3-8} cycloalkoxy, cycloalkenyloxy, heterocycloalkyloxy, heterocycloalkenyloxy, C_{1-8} alkylamino, C_{1-8} haloalkylamino, dialkylamino, alkenylamino, alkynylamino, arylamino, heteroarylamino, C_{3-8} cycloalkylamino, cycloalkenylamino, heterocycloalkylamino, and heterocycloalkenylamino, each optionally substituted.

17. ~~A method for treating a disorder amenable to modulation of α7 nAChR comprising administering to a patient in need of such treatment~~ Use of a compound according to any one of Claims 1-13, a pharmaceutically acceptable salt or prodrug thereof or a pharmaceutical composition of any one of claims 14-16 in the manufacture of a medicament for treating a disorder amenable to modulation of α7 nAChR in a patient in need thereof.

18. Use of a compound according to any one of claims 1-13 or pharmaceutically acceptable salts and prodrugs thereof, or a pharmaceutical composition according to any one of claims 14-16 in the manufacture of a medicament for ~~A method of treating~~ a disorder selected from neurodegenerative diseases, senile dementias, schizophrenia, Alzheimer's disease, learning, cognition and attention deficits, memory loss, Lewy Body dementia, attention-deficit disorder, attention deficit hyperactivity disorder, anxiety, mania, manic depression, Parkinson's disease, Huntington's disease, depression, amyotrophic lateral sclerosis, brain inflammation, cognitive deficit due to traumatic brain injury, Tourette's syndrome, and autism spectrum disorder in a patient in need thereof. ~~comprising administering to a patient in need thereof a compound according to any one of claims 1-13 or pharmaceutically acceptable salts and prodrugs thereof, or a pharmaceutical composition according to any one of claims 14-16.~~

19. ~~A method for treating a cognitive disorder related to learning or memory comprising administering to a patient in need of such treatment~~ Use of a compound according to any one of

claims 1-13 or pharmaceutically acceptable salts and prodrugs thereof, or a pharmaceutical composition according to any one of claims 14-17 in the manufacture of a medicament for treating a cognitive disorder related to learning or memory in a patient in need thereof:.

~~20. A method for the treatment of disorders which comprises administering to a patient in need of such treatment a compound of any one of Claims 1 to 13 or a pharmaceutically acceptable salt or prodrug thereof, or a pharmaceutical composition of any one of claims 14-16, with activity for positive allosteric modulation of currents at α7 nAChR receptors in which modulated currents retain the rapid native kinetics and native desensitization of the receptor observed in the absence of said compound or pharmaceutically acceptable salt or prodrug thereof.~~

~~21~~20. The ~~method~~ use of Claim 18, wherein the disorder is a neurodegenerative disorder.

~~22~~21. The ~~method~~ use of Claim 18, wherein the disorder is a senile dementia.

~~23~~22. The ~~method~~ use of Claim 18, wherein the disorder is Alzheimer's disease.

~~24~~23. The ~~method~~ use of Claim 18, wherein the disorder is schizophrenia.

~~25~~24. The ~~method~~ use of Claim 17, wherein the disorder is mild cognitive impairment.

~~26~~25. The ~~method~~ use of Claim 18, wherein the disorder is Parkinson's disease.

~~27~~26. The ~~method~~ use of Claim 17, wherein the disorder is inflammation.

~~28~~27. The ~~method~~ use of Claim 17, wherein the disorder is an immune system disorder.

~~29~~28. The ~~method~~ use of Claim 17, wherein the composition is administered to treat pain, inflammation, septic shock, ulcerative colitis, Crohn's disease or irritable bowel syndrome.

~~30~~29. The ~~method~~ use of Claim 18 wherein the condition treated is autism spectrum disorder.

30. A compound of any one of Claims 1 to 13 or a pharmaceutically acceptable salt or prodrug thereof, or a pharmaceutical composition of any one of Claims 14-16, or a use of a

compound according to any one of Claims 17-29, wherein said compound or pharmaceutically acceptable salt or prodrug thereof comprises activity for positive allosteric modulation of currents at α7 nAChR receptors in which modulated currents retain the rapid native kinetics and native desensitization of the receptor observed in the absence of said compound or pharmaceutically acceptable salt or prodrug thereof.