CLAIMS

What is claimed is:

1. A method of treating ataxia in a patient in need thereof, comprising administering to the patient a therapeutically effective amount of a riluzole prodrug.

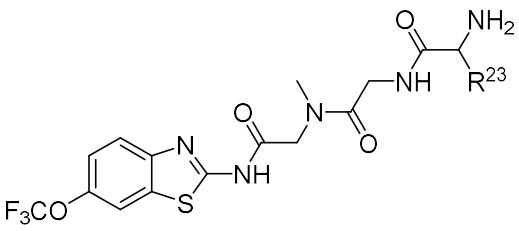
2. The method of claim 1 wherein the ataxia is one or more of Friedreichs ataxia, Ataxia telangiectasia, Autosomal recessive ataxia with oculomotor apraxia type 1, Autosomal recessive ataxia with oculomotor apraxia type 2, Spinocerebellar ataxia with axonal neuropathy, Abetalipoproteinemia, Ataxia with isolated vitamin E deficiency, Refsums disease and Cerebrotendinous xanthomatosis.

~~2~~3. The method of claim 1 wherein the ataxia is Spinocerebellar ataxia selected from SCA1, SCA2, SCA3, SCA6, SCA7, SCA8 and SCA10.

~~3~~4. The method of claim 2 or 3 wherein the ataxia is one or more of an ataxia associated with translated GAG repeat expansions, an ataxia associated with untranslated repeat expansions in non-coding regions, or an ataxia associated with point-mutations.

~~4~~5. The method of claim 1 wherein the ataxia is a multiple system atrophy ataxia or a sporadic adult-onset ataxia.

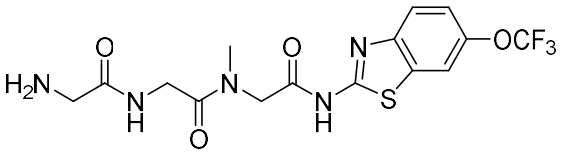
~~5~~6. The method of claim 1 wherein the riluzole prodrug has the following formula:



and pharmaceutically acceptable salts thereof, wherein:

R_{23} is selected from the group consisting H, CH_3, CH_2CH_3, $CH_2CH_2CH_3$, CH_2CCH, $CH(CH_3)_2$, $CH_2CH(CH_3)_2$, $CH(CH_3)CH_2CH_3$, CH_2OH, CH_2OCH_2Ph, $CH_2CH_2OCH_2Ph$, $CH(OH)CH_3$, CH_2Ph, CH_2(cyclohexyl), CH_2(4-OH-Ph), $(CH_2)_4NH_2$, $(CH_2)_3NHC(NH_2)NH$, CH_2(3-indole), CH_2(5-imidazole), CH_2CO_2H, $CH_2CH_2CO_2H$, CH_2CONH_2, and $CH_2CH_2CONH_2$.

~~6~~7. The method of claim ~~5~~ 6 wherein the riluzole prodrug has the following formula:



~~7~~8. The method of claim 1 wherein the treatment provides an improvement in the patient's total SARA score of at least 0.8, or 0.9, or 1.0, or 1.1, or 1.2, or 1.3, or 1.4, or 1.5, or 1.6, or 1.7, or 1.8, or 1.9, or 2.0, or greater.

~~8~~9. The method of claim 1 wherein the riluzole prodrug is administered to the patient at a dosage of from about 17.5 to 200 mg per day.

~~9~~10. The method of claim ~~8~~ 9 wherein the riluzole prodrug is administered to the patient at a dosage of about 17.5, or 35, or 70, or 100, or 140, or 200 mg per day.

~~10~~11. The method of claim ~~9~~ 10 wherein the riluzole prodrug is administered to the patient at a dosage of 200 mg, once per day.

~~11~~12. The method of claim ~~9~~ 10 wherein the riluzole prodrug is administered to the patient at a dosage of 140 mg, once per day.

~~12~~13. The method of claim 1 wherein the riluzole prodrug is administered to the patient once per day.

~~13~~14. The method of claim 1 wherein the riluzole prodrug is administered to the patient twice per day.

~~14~~15. The method of claim 1 wherein the riluzole prodrug is administered to the patient in the form of a capsule.

~~15~~16. The method of claim 1 wherein the riluzole prodrug is administered to the patient in the form of a tablet.

~~16~~17. The method of claim 1 wherein the riluzole prodrug is administered to the patient for a duration of from about 8 weeks to 48 weeks.

~~17~~18. A kit for treating a patient afflicted with ataxia, the kit comprising:

(a) a riluzole prodrug; and

(b) instructions for administering the riluzole prodrug in the method of any of claims 1-~~21~~17.

~~18~~19. The kit of claim ~~17~~ 18 wherein the prodrug has the following formula:

