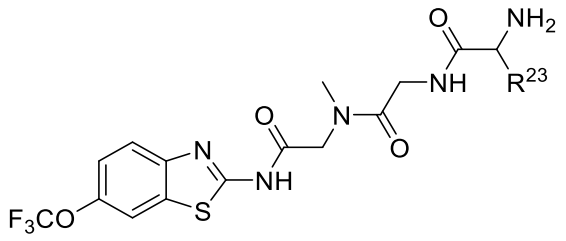
CLAIMS

1. Use of a riluzole prodrug in the manufacture of a medicament for treating ataxia in a patient in need thereof,

wherein the riluzole prodrug has the following formula:



and pharmaceutically acceptable salts thereof, wherein:

$R_{23}$ is selected from the group consisting of 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 $CH_2CH_2CONH_2$.

wherein the ataxia is Spinocerebellar ataxia selected from SCA1, SCA2, SCA3, SCA6, SCA7, SCA8 and SCA10, and

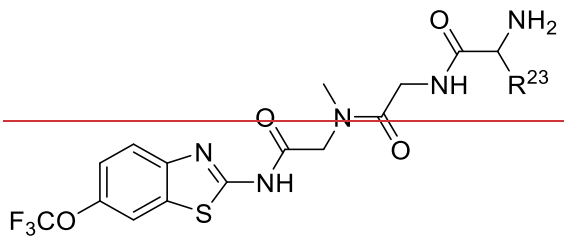
wherein the medicament provides an improvement in the patient's total SARA score of at least 0.8.

2. The use 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.

3. The use of claim 2, 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. The use of claim 1, wherein the ataxia is a multiple system atrophy ataxia or a sporadic adult-onset ataxia.

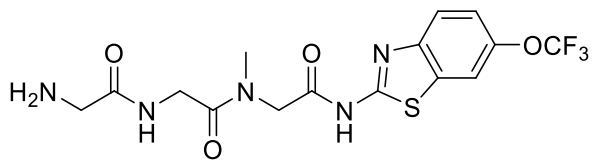
~~5. The use of claim 1, wherein the riluzole prodrug has the following formula:~~



~~and pharmaceutically acceptable salts thereof, wherein:~~

~~$R_{23}$ is selected from the group consisting of 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 $CH_2CH_2CONH_2$.~~

56. The use of claim 15, wherein the riluzole prodrug has the following formula:



67. The use of claim 1, wherein the medicament provides an improvement in the patient's total SARA score of at least 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.

78. The use of claim 1, wherein the riluzole prodrug is to be administered to the patient at a dosage of from about 17.5 to 200 mg per day.

89. The use of claim 78, wherein the riluzole prodrug is to be administered to the patient at a dosage of about 17.5, or 35, or 70, or 100, or 140, or 200 mg per day.

910. The use of claim 89, wherein the riluzole prodrug is to be administered to the patient at a dosage of 200 mg, once per day.

101. The use of claim 89, wherein the riluzole prodrug is to be administered to the patient at a dosage of 140 mg, once per day.

112. The use of claim 1, wherein the riluzole prodrug is to be administered to the patient once per day.

123. The use of claim 1, wherein the riluzole prodrug is to be administered to the patient twice per day.

134. The use of claim 1, wherein the riluzole prodrug is to be administered to the patient in the form of a capsule.

145. The use of claim 1, wherein the riluzole prodrug is to be administered to the patient in the form of a tablet.

156. The use of claim 1, wherein the riluzole prodrug is to be administered to the patient for a duration of from about 8 weeks to 48 weeks.

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

~~(a) a medicament comprising 50-70 wt% riluzole prodrug, 10-30% fish gelatin, 10-20 wt% of one or more fillers, and 0.1-5.0% of one or more flavorants; and~~
~~(b) instructions for administering the medicament in the use of any one of claims 1-16.~~

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

