## CLAIMS

1. A composition for use in the treatment of ALS or a related disorder, comprising at least two drugs selected from acamprosate, baclofen, cinacalcet, mexiletine, sulfisoxazole and torasemide, or a salt, prodrug, derivative of any chemical purity, or sustained-release formulation thereof.

2. The composition for use of claim 1 comprising at least one of the following drug combinations:
   - baclofen and acamprosate,
   - baclofen and acamprosate and torasemide,
   - mexiletine and cinacalcet,
   - torasemide and baclofen,
   - baclofen and cinacalcet, or
   - torasemide and sulfisoxazole.

3. The composition for use of claim 1 or 2 further comprising riluzole, or a salt, prodrug, derivative of any chemical purity, or sustained-release formulation thereof.

4. The composition for use of any one of the preceding claims, which further comprises a pharmaceutically acceptable carrier or excipient.

5. The composition for use of any one of the preceding claims, wherein the compounds are formulated or administered together, separately or sequentially.

6. The composition for use of any one of the preceding claims, wherein said composition is administered repeatedly to the subject.

7. The composition for use of any one of claims 3 to 6, wherein riluzole is administered in a dosage from 0.1 to 50 mg per day.

8. The composition for use of any one of claims 1 to 7, wherein acamprosate, when present, is administered in a dosage of less than 50 mg per day, more preferably less than 10 mg per day.

9. The composition for use of any one of claims 1 to 8, wherein baclofen, when present, is administered in a dosage of less than 30 mg per day.

10. The composition for use of any one of the preceding claims, wherein said composition is administered orally.

11. The composition for use of any one of the preceding claims, wherein the combination of at least two drugs selected from the group consisting of acamprosate, baclofen, cinacalcet, mexiletine, sulfisoxazole and torasemide is administered orally and repeatedly every other day, in alternance with riluzole.

12. The composition for use of any one of the preceding claims, wherein the compounds are formulated together.

13. Riluzole, or a salt, prodrug, derivative of any chemical purity, or sustained-release formulation thereof, for use in combination with baclofen, or a salt, prodrug, derivative of any chemical purity, or sustained-release formulation thereof, and in further combination with a compound selected from acamprosate, cinacalcet, mexiletine, sulfisoxazole and torasemide, or a salt, prodrug, derivative of any chemical purity, or sustained-release formulation thereof, for treating ALS by combined, separate or sequential administration to a subject in need thereof.

CLAIMS

1. The use of a combination of at least two compounds selected from cinacalcet, mexiletine, sulfisoxazole, torasemide, riluzole, acamprosate and baclofen, or salts, prodrugs, derivatives or sustained-release formulation thereof, in the manufacture of a medicament for treating amyotrophic lateral sclerosis (ALS) or a related disorder in a subject in need thereof.

2. The use of claim 1, of sulfisoxazole or a salt, prodrug, derivative or sustained-release formulations thereof, in combination with at least one second compound selected from acamprosate, baclofen, cinacalcet, mexiletine, torasemide or riluzole, or salts, prodrugs, derivatives or sustained-release formulations thereof.

3. The use of claim 1, of torasemide or a salt, prodrug, derivative or sustained-release formulations thereof, in combination with at least one second compound selected from acamprosate, baclofen, cinacalcet, mexiletine, sulfisoxazole or riluzole, or salts, prodrugs, derivatives or sustained-release formulations thereof.

4. The use of claim 1, of mexiletine or a salt, prodrug, derivative or sustained-release formulations thereof, in combination with at least one second compound selected from acamprosate, baclofen, cinacalcet, torasemide, sulfisoxazole or riluzole, or salts, prodrugs, derivatives or sustained-release formulations thereof.

5. The use of claim 1, of one of the following combinations of compounds:
- torasemide and sulfisoxazole,
- torasemide and riluzole,
- sulfisoxazole and riluzole,
- mexiletine and cinacalcet,
- mexiletine and cinacalcet and riluzole, or
- torasemide and sulfisoxazole and riluzole,

or salts, prodrugs, derivatives, or sustained-release formulations thereof.

6. The use of anyone of claims 1 to 5, wherein the compounds are formulated with a pharmaceutically acceptable carrier or excipient.

7. The use of anyone of claims 1 to 6, wherein the compounds are administered repeatedly to the subject.

8. The use of anyone of claims 1 to 7, wherein the compounds are formulated or administered together, separately or sequentially.

9. The use of claim 8, wherein the compounds are formulated together.

10. The use of claim 5, wherein sulfisoxazole or torasemide, or the combination thereof, or the salts, prodrugs, derivatives, or sustained-release formulations thereof, are administered alternately with riluzole, or a salt, prodrug, derivative or sustained-release formulation thereof.

11. The use of anyone of the preceding claims, for treating ALS.

12. The use of anyone of claims 1 to 10, for reducing motor neuron degeneration in said subject.

13. The use of anyone of the preceding claims, wherein sulfisoxazole is administered in a dosage of less than 800 mg per day.

14. The use of anyone of the preceding claims, wherein torasemide is administered in a dosage from about 0.05 to 4 mg per day.

15. The use of anyone of the preceding claims, wherein riluzole is administered in a dosage from about 0.01 to 50 mg per day.

16. The use of anyone of the preceding claims, wherein said compounds are administered orally.

17. The use of anyone of the preceding claims, wherein said related disorder is a disorder selected from the group consisting of primary lateral sclerosis, progressive muscular atrophy, pseudobulbar palsy and progressive bulbar palsy, and fronto temporal dementia.

18. A pharmaceutical composition comprising one of the following combinations of compounds:

- torasemide and riluzole,
- sulfisoxazole and riluzole,
- torasemide, sulfisoxazole and riluzole or,
- mexiletine and cinacalcet and riluzole,

or salts, prodrugs, derivatives, or sustained-release formulations thereof.