[0008] Methods according to the disclosure are useful in treating a wide variety of symptoms associated with multiple sclerosis, including but not limited to disruptions in sleep quality, energy quality, mood quality, pain, and/or cognitive functioning. In methods, apoaequorin is preferably administered to the subject in the form of a pharmaceutical composition.

In one aspect, there is provided use of an effective amount of apoaequorin in the manufacture of a medicament for alleviating a symptom associated with Multiple Sclerosis in a subject in need of such treatment.

In one aspect, there is provided use of apoaequorin for the manufacture of a pharmaceutical composition for alleviating a symptom associated with Multiple Sclerosis in a subject.

~~In one aspect, there is provided apoaequorin for use in alleviating a symptom associated with Multiple Sclerosis in a subject.~~

[0009] Other objects, features and advantages of the present disclosure will become apparent after review of the specification and claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] Figure 1 is a chart showing the differences of the Multiple Sclerosis Impact Scale (MSIS) scores between the apoaequorin arm and the placebo arm groups.

[0011] Figure 2 is a chart showing the differences of the Physical Health subscale of the Multiple Sclerosis Quality of Life (MSQOL) scores between the apoaequorin arm and the placebo arm groups.

[0012] Figure 3 is a chart showing the differences of the Physical Health subscale of the MSQOL between the apoaequorin and the placebo groups.

[0013] Figure 4 is a chart showing the differences of the Role Limitations-Physical subscale of the MSQOL between the apoaequorin and the placebo groups.

[0014] Figure 5 is a chart showing the differences of the Role Limitations-Emotional subscale of the MSQOL between the apoaequorin and the placebo groups.

[0015] Figure 6 is a chart showing the differences of the Pain subscale of the MSQOL between the apoaequorin and the placebo groups.

[0016] Figure 7 is a chart showing the differences of the Modified Fatigue Impact Scale (MFIS) composite scores between the apoaequorin and the placebo groups.

[0017] Figure 8 is a chart showing the differences of the MFIS Physical subscale composite scores between the apoaequorin and the placebo groups.

[0018] Figure 9 is a chart showing the differences of the MFIS Cognitive subscale composite scores between the apoaequorin and the placebo groups.

[0019] Figure 10 is a chart showing the differences of the MSQOL Physical Health composite scores between the apoaequorin and the placebo groups.

11. The use of claim 9, wherein the subject is taking disease-modifying drugs in addition to said method.

12. Use of apoaequorin for the manufacture of a pharmaceutical composition for alleviating a symptom associated with Multiple Sclerosis in a subject.

13. The use according to claim 12, wherein the pharmaceutical composition is formulated as an oral dose comprising the apoaequorin and a carrier.

14. The use according to claim 13, wherein the pharmaceutical composition contains about 10 mg to about 80 mg of apoaequorin.

15. The use according to claim 13, wherein the pharmaceutical contains about 20 mg of apoaequorin.

16. The use according to claim 13, wherein the pharmaceutical contains about 40 mg of apoaequorin.

17. The use according to claim 12, wherein the symptom associated with Multiple Sclerosis is quality of sleep, energy, mood, cognitive function, or pain.

~~18. Apoaequorin for use in alleviating a symptom associated with Multiple Sclerosis in a subject.~~

~~19. The apoaequorin of claim 18, wherein the apoaequorin is formulated as an oral dose comprising the apoaequorin and a carrier.~~

~~20. The apoaequorin of claim 19, wherein about 10 mg to about 80 mg of the apoaequorin is contained in said oral dose.~~

~~21. The apoaequorin of claim 19, wherein about 20 mg of the apoaequorin is contained in said oral dose.~~

~~22. The apoaequorin of claim 19, wherein about 40 mg of the apoaequorin is contained in said oral dose.~~

~~23. The apoaequorin of claim 18, wherein the symptom associated with Multiple Sclerosis is quality of sleep, energy, mood, cognitive function, or pain.~~