[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, to thereby treat Multiple Sclerosis, wherein the effective amount of apoaequorin is formulated as an oral dose comprising apoaequorin and a carrier, wherein about 40 mg to about 80 mg of apoaequorin is contained in said oral dose.

[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.

CLAIMS

What is claimed is:

1. 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, to thereby treat Multiple Sclerosis, wherein the effective amount of apoaequorin is formulated as an oral dose comprising apoaequorin and a carrier, wherein about 40 mg to about 80 mg of apoaequorin is contained in said oral dose.

2. The use according to claim 1, wherein the symptom associated with Multiple Sclerosis is sleep-related and administration of apoaequorin to said subject improves sleep quality in the subject.

3. The use according to claim 1, wherein the symptom associated with Multiple Sclerosis is energy-related and administration of apoaequorin to said subject improves energy quality in the subject.

4. The use according to claim 1, wherein the symptom associated with Multiple Sclerosis is mood-related and administration of apoaequorin to said subject improves mood quality in the subject.

5. The use according to claim 1, wherein the symptom associated with Multiple Sclerosis is pain-related and administration of apoaequorin to said subject alleviates pain in the subject.

6. The use according to claim 1, wherein the symptom associated with Multiple Sclerosis is memory-related and administration of apoaequorin to said subject improves memory quality in the subject.

7. The use according to any one of claims 1-6, wherein apoaequorin is to be administered to said subject in the form of a pharmaceutical composition comprising the effective amount of apoaequorin and a carrier.

8. The use according to any one of claims 1-6, wherein the subject has been diagnosed with either Relapsing Remitting Multiple Sclerosis or Secondary Progressive Multiple Sclerosis.

9. The use of claim 8, wherein the subject is in a Relapsed State.

10. The use of claim 8, wherein the subject is taking disease-modifying drugs in addition to said method.

11. The use according to claim 1, wherein the oral dose contains about 40 mg of apoaequorin.