CLAIMS

1. Use of lemborexant, pharmaceutically acceptable salts thereof, and/or solvates of any of the foregoing in the manufacture of a medicament for the treatment of irregular sleep-wake rhythm disorder in a subject.

2. The use according to claim 1, wherein the irregular sleep-wake rhythm disorder is due to traumatic brain injury.

3. The use according to claim 1, wherein the irregular sleep-wake rhythm disorder is due to at least one neurodevelopmental disorder.

4. The use according to claim 1, wherein the irregular sleep-wake rhythm disorder is due to dementia due to Alzheimer's disease and/or related disorders.

5. The use according to claim 1, wherein the irregular sleep-wake rhythm disorder is due to dementia due to Alzheimer's disease.

6. The use according to any one of claims 1 to 5, wherein the subject suffers from at least one other circadian rhythm sleep disorder in addition to irregular sleep-wake rhythm disorder.

7. Use of lemborexant, pharmaceutically acceptable salts thereof , and/or solvates of any of the foregoing in the manufacture of a medicament for improving continuity of nocturnal sleep in a subject with irregular sleep-wake rhythm disorder.

8. Use of lemborexant, pharmaceutically acceptable salts thereof, and/or solvates of any of the foregoing in the manufacture of a medicament for improving behaviors and cognitive difficulties associated with irregular sleep-wake rhythm disorder in a subject.

9. Use of lemborexant, pharmaceutically acceptable salts thereof, and/or solvates of any of the foregoing in the manufacture of a medicament for the treatment of excessive daytime sleepiness and/or napping in a subject with irregular sleep-wake rhythm disorder.

10. The use according to any one of claims 1 to 9, wherein the subject experiences a stabilization of one or more circadian rhythms.

11. The use according to any one of claims 1 to 9, wherein the subject experiences an improvement of one or more circadian rhythms.

12. Use of lemborexant, pharmaceutically acceptable salts thereof, and/or solvates of any of the foregoing in the manufacture of a medicament for the treatment of sleep disruption, sleep-wake fragmentation, circadian rhythm sleep disorder, and irregular sleep-wake rhythm disorder in a subject with dementia due to Alzheimer's disease and/or related disorders.

13. Use of lemborexant, pharmaceutically acceptable salts thereof, and/or solvates of any of the foregoing in the manufacture of a medicament for the treatment of sleep disruption, sleep-wake fragmentation, circadian rhythm sleep disorder, and irregular sleep-wake rhythm disorder in a subject with mild cognitive impairment due to Alzheimer's disease.

14. Use of lemborexant, pharmaceutically acceptable salts thereof, and/or solvates of any of the foregoing in the manufacture of a medicament for the improvement of continuity of nocturnal sleep in a subject with dementia due to Alzheimer's disease and/or related disorders.

15. Use of lemborexant, pharmaceutically acceptable salts thereof, and/or solvates of any of the foregoing in the manufacture of a medicament for the improvement of

continuity of nocturnal sleep in a subject with mild cognitive impairment due to Alzheimer's disease.

16. Use of lemborexant, pharmaceutically acceptable salts thereof, and/or solvates of any of the foregoing in the manufacture of a medicament for the improvement of at least one behavior and/or cognitive difficulty associated with dementia in a subject with dementia due to Alzheimer's disease and/or related disorders.

17. Use of lemborexant, pharmaceutically acceptable salts thereof, and/or solvates of any of the foregoing in the manufacture of a medicament for the improvement of at least one behavior and/or cognitive difficulty associated with dementia in a subject with mild cognitive impairment due to Alzheimer's disease.

18. Use of lemborexant pharmaceutically acceptable salts thereof, and/or solvates of any of the foregoing in the manufacture of a medicament for the treatment of excessive daytime sleepiness and/or napping in a subject with dementia due to Alzheimer's disease and/or related disorders.

19. Use of lemborexant, pharmaceutically acceptable salts thereof, and/or solvates of any of the foregoing in the manufacture of a medicament for the treatment of excessive daytime sleepiness and/or napping in a subject with mild cognitive impairment due to Alzheimer's disease.

20. The use according to any one of claims 12 to 19, wherein the subject experiences a clinical stabilization in cognitive impairment due to Alzheimer's disease and/or related disorders.

21. The use according to any one of claims 12 to 20, wherein the subject experiences a clinical improvement in the cognitive impairment due to Alzheimer's disease and/or related disorders.

22. The use according to any one of claims 12 to 21, wherein the subject experiences a clinical reduction in rate of decline in the cognitive impairment due to Alzheimer's disease and/or related disorders.

23. The use according to any one of claims 12 to 22, wherein the subject experiences a clinical stabilization of the dementia due to Alzheimer's disease and/or related disorders.

24. The use according to any one of claims 12 to 23, wherein the subject experiences a clinical improvement of the dementia due to Alzheimer's disease and/or related disorders.

25. The use according to any one of claims 12 to 24, wherein the subject experiences a clinical reduction in rate of decline in dementia due to Alzheimer's disease and/or related disorders.

26. The use according to any one of claims 12 to 25, wherein the subject experiences a decrease in behavioral disturbances.

27. The use according to any one of claims 1 to 26, wherein sleep is consolidated during the nighttime hours.

28. The use according to any one of claim 1 to 27, wherein wakefulness is consolidated during the daytime hours.

29. The use according to any one of claims 1 to 28, wherein the subject experiences an increase in sleep efficiency.

30. The use according to any one of claims 1 to 29, wherein the subject experiences an increase in wake efficiency.

31. The use according to any one of claims 1 to 30, wherein the subject experiences a decrease in daytime sleepiness and/or daytime napping.

32. The use according to any one of claims 1 to 31, wherein the subject experiences an increase in daytime alertness.

33. The use according to any one of claims 1 to 32, wherein the subject experiences a reduction in the accumulation of Aβ plaque in the brain.

34. The use according to any one of claims 1 to 33, wherein the subject experiences a reduction of soluble toxic Aβ aggregates.