CLAIMS

We claim:

1. A method of treating an individual for delayed sleep time comprising:

determining or having determined from a biological sample of the individual that the individual has a GG genotype at the rs12188518 single nucleotide polymorphism (SNP) locus; and

administering to the individual once daily before a target bedtime a dose of tasimelteon effective to advance the sleep time of the individual.

2. The method of claim 1, wherein the administration is oral.

3. The method of claim 1, wherein the administration comprises an oral dose 0.5 hour to 2 hours before the individual's target bedtime.

4. The method of claim 1, wherein the dose is between about 10 mg and about 100 mg.

5. The method of claim 3, wherein the dose is between about 20 mg and about 50 mg.

6. The method of claim 4, wherein the dose is 20 mg.

7. A method of treating an individual for delayed sleep time comprising:

determining or having determined from a biological sample of the individual that the individual has a CC genotype at the rs11248864 single nucleotide polymorphism (SNP) locus; and

administering to the individual once daily before a target bedtime a dose of tasimelteon effective to advance the sleep time of the individual.

8. The method of claim 7, wherein the administration is oral.

9. The method of claim 7, wherein the administration comprises an oral dose 0.5 hour to 2 hours before the target bedtime.

~~10. The method of claim 7, wherein the dose is between about 10 mg and about 100 mg.~~

~~11. The method of claim 10, wherein the dose is between about 20 mg and about 50 mg.~~

~~12. The method of claim 11, wherein the dose is 20 mg.~~

~~13. In a method of treating a patient for delayed sleep time, the improvement comprising:~~

~~determining or having determined from a biological sample of the patient the patient's genotype at the rs12188518 single nucleotide polymorphism (SNP) locus, the rs11248864 SNP locus, or both; and~~

~~in the case that the genotype of the patient is GG at the rs12188518 SNP locus, the genotype of the patient is CC at the rs11248864 SNP locus, or both, administering to the patient once daily a dose of tasimelteon effective to advance the patient's sleep time.~~

~~14. The improvement of claim 13, wherein the administration comprises an oral dose 0.5 hour to 2 hours before a target bedtime.~~

~~15. The improvement of claim 14, wherein the dose is about 10 mg to about 100 mg.~~

~~16. The improvement of claim 15, wherein the dose is about 20 mg to about 50 mg.~~

~~17. The improvement of claim 16, wherein the dose is about 20 mg.~~

~~18. The improvement of claim 13, wherein the dose administered to the patient is greater than would be administered to an individual to advance sleep time not having a genotype indicative of a predisposition to having a delayed sleep time.~~

~~19. A method of delaying sleep time or delaying sleep phase in an individual, the method comprising:~~

~~determining or having determined from a biological sample of the individual that the individual has an AA or AG genotype at the rs12188518 single nucleotide polymorphism (SNP) locus; and~~

~~administering to the individual at least one hyperpolarization-activated cyclic nucleotide-gated (HCN) channel inhibitor.~~

~~20. The method of claim 19, wherein the at least one HCN channel inhibitor is selected from a group consisting of: ivabradine, cilobradine, zatebradine, and cesium.~~

~~21. A method of delaying sleep time or delaying sleep phase in an individual, the method comprising:~~

~~determining or having determined from a biological sample of the individual that the individual has a TT or TC genotype at the rs11248864 single nucleotide polymorphism (SNP) locus; and~~

~~administering to the individual at least one hyperpolarization-activated cyclic nucleotide-gated (HCN) channel inhibitor.~~

~~22. The method of claim 21, wherein the at least one HCN channel inhibitor is selected from a group consisting of: ivabradine, cilobradine, zatebradine, ZD7299, and cesium.~~

~~23. A method of treating an individual determined to have a genotype predictive of an elongated circadian period (tau) based upon the individual having an AA genotype at the rs72762058 single nucleotide polymorphism (SNP) locus, the method comprising:~~

~~administering to the individual once daily before a target bedtime a dose of tasimelteon effective to shorten the tau of the individual.~~

~~24. The method of claim 23, wherein the administration comprises an oral dose 0.5 hour to 2 hours before the target bedtime.~~

~~25. The method of claim 23, wherein the dose is about 10 mg to about 100 mg.~~

~~26. The method of claim 25, wherein the dose is about 20 mg to about 50 mg.~~

~~27. The method of claim 26, wherein the dose is about 20 mg.~~

~~28. A method of altering a circadian period (tau) in an individual, the method comprising:~~

~~determining a genotype of the individual at the rs72762058 single nucleotide polymorphism (SNP) locus; and~~

~~in the case that the genotype of the individual at the rs72762058 SNP locus is AA, administering to the individual a quantity of tasimelteon effective to decrease the tau of the individual.~~

~~29. The method of claim 28, wherein the administration is oral.~~

~~30. The method of claim 28, wherein the administration comprises an oral dose 0.5 hour to 2 hours before the individual's target bedtime.~~

~~31. The method of claim 28, wherein the dose is between about 10 mg and about 100 mg.~~

~~32. The method of claim 31, wherein the dose is between about 20 mg and about 50 mg.~~

~~33. The method of claim 32, wherein the dose is 20 mg.~~

~~34. A method of treating a patient having a delayed sleep phase who is being treated with a hyperpolarization-activated cyclic nucleotide-gated (HCN) channel inhibitor, the method comprising:~~

~~administering to the patient once daily a dose of tasimelteon effective to advance the patient's sleep time.~~

~~35. The method of claim 34, wherein the HCN channel inhibitor is selected from a group consisting of: ivabradine, cilobradine, zatebradine, ZD7299, and cesium.~~

~~36. The method of claim 34, wherein the administration is oral.~~

~~37. The method of claim 34, wherein the administration comprises an oral dose 0.5 hour to 2 hours before the individual's target bedtime.~~

~~38. The method of claim 34, wherein the dose is between about 10 mg and about 100 mg.~~

~~39. The method of claim 38, wherein the dose is between about 20 mg and about 50 mg.~~

~~40. The method of claim 39, wherein the dose is 20 mg.~~

~~41. In a method of treating an individual for a circadian rhythm disorder, the improvement comprising:~~

~~determining a genotype of the individual at the rs72762058 single nucleotide polymorphism (SNP) locus; and~~

~~in the case that the genotype of the individual at the rs72762058 SNP locus is AA, administering to the individual a quantity of tasimelteon effective to shorten a circadian period (tau) of the individual.~~

~~42. The method of claim 41, wherein the administration is oral.~~

~~43. The method of claim 41, wherein the administration comprises an oral dose 0.5 hour to 2 hours before the individual's target bedtime.~~

~~44. The method of claim 41, wherein the dose is between about 10 mg and about 100 mg.~~

~~45. The method of claim 44, wherein the dose is between about 20 mg and about 50 mg.~~

~~46. The method of claim 45, wherein the dose is 20 mg.~~

CLAIMS

1. Use of tasimelteon in the manufacture of a medicament for the treatment of delayed sleep phase disorder (DSPD) in a patient having a genotype associated with DSPD,

wherein the genotype associated with DSPD is one or more genotype selected from a group consisting of: GG at the rs12188518 single nucleotide polymorphism (SNP) locus and CC at the rs11248864 SNP locus.

2. The use of claim 1, wherein the medicament is formulated for oral administration.

3. The use of claim 2, wherein the medicament is formulated for once daily oral administration.

4. The use of claim 3, wherein the medicament is formulated for delivery of an oral daily dose of tasimelteon of 10 mg to 100 mg.

5. The use of claim 4, wherein the medicament is formulated for delivery of an oral daily dose of tasimelteon of 20 mg to 50 mg.

6. The use of claim 5, wherein the medicament is formulated for delivery of an oral daily dose of tasimelteon of 20 mg.

7. The use of claim 1, wherein the medicament is formulated for delivery of a single daily dose of tasimelteon effective to advance a sleep time of the patient.

8. The use of claim 1, wherein the genotype associated with DSPD is GG at the rs12188518 SNP locus.

9. The use of claim 1, wherein the genotype associated with DSPD is CC at the rs11248864 SNP locus.