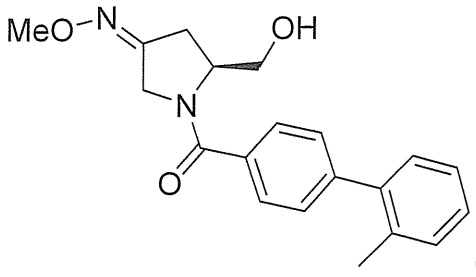
Claims

1. Use of a compound, (3*Z*,5*S*)-5-(hydroxymethyl)-1-[(2'-methyl-1,1'-biphenyl-4-yl)carbonyl]pyrrolidin-3-one O-methyloxime, represented by formula (**II**)



(**II**),

in the manufacture of a medicament for treating a human female subject undergoing a procedure in which one or more human embryos are to be transferred to the uterus of the subject to establish pregnancy,

wherein the subject has been identified as likely to benefit from treatment with the compound by a method comprising comparing the concentration of progesterone in a sample isolated from the subject to a progesterone reference level, wherein a finding that the concentration of progesterone in the sample isolated from the subject is less than the progesterone reference level identifies the subject as likely to benefit from treatment with the compound.

2. The use of claim 1, wherein the compound is to be administered to the subject prior to transfer of one or more embryos to the subject.

3. The use of claim 2, wherein the compound is to be administered to the subject from 3 hours to 5 hours prior to the transfer of the one or more embryos to the subject.

4. The use of claim 3, wherein the compound is to be administered to the subject about 4 hours prior to the transfer of the one or more embryos to the subject.

5. The use of claim 1, wherein the compound is formulated for administration to the subject in a single oral dose.

6. The use of claim 5, wherein the compound is formulated for administration to the subject in a single oral dose of from 850 mg to 950 mg.

7. The use of claim 6, wherein the compound is formulated for administration to the subject in a single oral dose of about 900 mg.

8. The use of claim 1, wherein the sample isolated from the subject is a blood sample.

9. The use of claim 1, wherein the procedure comprises transfer of a single embryo to the subject.

10. The use of claim 1, wherein the one or more embryos are produced ex vivo by in vitro fertilization (IVF).

11. The use of claim 10, wherein the one or more embryos are produced ex vivo by IVF of one or more ova isolated from the subject.

12. The use of claim 1, wherein the one or more embryos are produced ex vivo by intracytoplasmic sperm injection (ICSI).

13. The use of claim 12, wherein the one or more embryos are produced ex vivo by ICSI into one or more ova isolated from the subject.

14. The use of claim 11, wherein the one or more ova are isolated from the subject from 1 day to 7 days prior to the transfer of the one or more embryos to the subject.

15. The use of claim 14, wherein the one or more ova are isolated from the subject about 5 days prior to the transfer of the one or more embryos to the subject.

16. The use of claim 14, wherein the one or more ova are isolated from the subject about 3 days prior to the transfer of the one or more embryos to the subject.

17. The use of claim 11, wherein the subject is administered human chorionic gonadotropin (hCG) prior to isolation of the one or more ova from the subject.

18. The use of claim 17, wherein the hCG is administered to the subject by a single intravenous injection.

19. The use of claim 11, wherein the subject is administered progesterone following isolation of the one or more ova from the subject.

20. The use of claim 19, wherein the progesterone is administered intravaginally.

21. The use of claim 20, wherein the progesterone is administered in an amount of from 300 mg to 600 mg per dose.

22. The use of claim 21, wherein the subject is administered one dose of the progesterone per day.

23. The use of claim 22, wherein the progesterone is administered to the subject beginning within 24 hours of the isolation of the one or more ova and continuing for 6 or more weeks following the transfer of the one or more embryos to the subject.

24. The use of claim 11, wherein the one or more embryos are transferred to the subject during the same menstrual cycle as isolation of the one or more ova from the subject.

25. The use of claim 1, wherein the one or more embryos are frozen and thawed prior to the transfer of the one or more embryos to the subject.

26. The use of claim 1, wherein the sample is isolated from the subject from 1 day to 7 days prior to the transfer of the one or more embryos to the subject.

27. The use of claim 11, wherein the sample is isolated from the subject up to 24 hours prior to isolation of the one or more ova from the subject.

28. The use of claim 17, wherein the sample is isolated from the subject within about 1 hour of the subject being administered the hCG.

29. The use of any one of claims 1-28, wherein the progesterone reference level is from 1.0 ng/ml to 2.0 ng/ml.

30. The use of claim 29, wherein the progesterone reference level is about 1.5 ng/ml.

31. The use of any one of claims 1-28, wherein the subject sustains pregnancy for at least 14 days following the transfer of the one or more embryos to the subject.

32. The use of any one of claims 1-28, wherein the subject sustains pregnancy for at least 6 weeks following the transfer of the one or more embryos to the subject.

33. The use of claim 11, wherein the subject sustains pregnancy for at least 10 weeks following the isolation of the one or more ova from the subject.

34. The use of any one of claims 1-28, wherein the subject sustains pregnancy and exhibits a live birth following administration of the compound to the subject.

35. The use of claim 34, wherein the subject exhibits the live birth at a gestational age of at least 24 weeks.

36. The use of any one of claims 1-28, wherein the compound has a purity of at least 85%.

37. The use of claim 36, wherein the compound has a purity of from 85% to 99.9%.