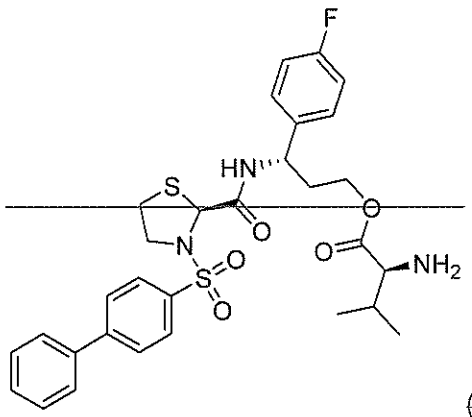
CLAIMS

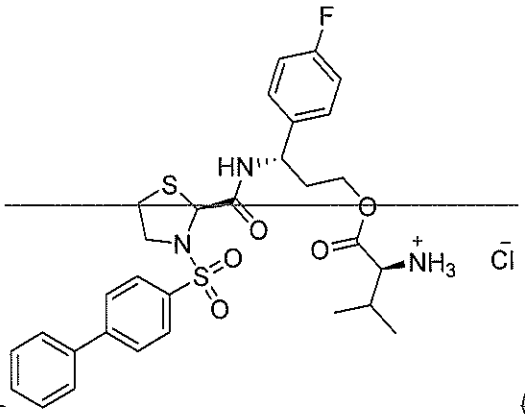
~~1. A pharmaceutical composition comprising a compound represented by formula (I)~~



~~(I)~~

~~or a pharmaceutically acceptable salt thereof, wherein said pharmaceutical composition further comprises an additional therapeutic agent.~~

~~2. The pharmaceutical composition of claim 1, wherein said compound is represented by formula (III).~~



~~(III)~~

~~3. The pharmaceutical composition of claim 1 or 2, wherein said additional therapeutic agent is an additional tocolytic agent.~~

4. The pharmaceutical composition of any one of claims 1-3, wherein said pharmaceutical composition comprises one or more excipients.

5. The pharmaceutical composition of any one of claims 1-4, wherein said compound has a purity of at least 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or 99.9%.

6. The pharmaceutical composition of claim 5, wherein said purity is ascertained by high pressure liquid chromatography (HPLC).

7. The pharmaceutical composition of claim 5, wherein said purity is ascertained by NMR spectroscopy.

8. The pharmaceutical composition of any one of claims 1-7, wherein said compound or pharmaceutical composition is formulated for oral administration to a subject.

9. The pharmaceutical composition of any one of claims 1-8, wherein said compound or pharmaceutical composition is a tablet, capsule, gel cap, powder, liquid solution, or liquid suspension.

10. The pharmaceutical composition of any one of claims 1-7, wherein said compound or pharmaceutical composition is formulated for intravenous administration to a subject.

11. The pharmaceutical composition of any one of claims 1-10, wherein said pharmaceutical composition comprises an oxytocin receptor antagonist.

12. The pharmaceutical composition of claim 11, wherein said oxytocin receptor antagonist is selected form the group consisting of atosiban, retosiban, barusiban, epelsiban, and nolasiban.

13. The pharmaceutical composition of any one of claims 1-12, wherein said pharmaceutical composition comprises a betamimetic.

14. The pharmaceutical composition of claim 13, wherein said betamimetic is selected from the group consisting of terbutaline, ritodrine, hexoprenaline, albuterol, fenoterol, nylidrin, and orciprenaline.

15. The pharmaceutical composition of any one of claims 1-14, wherein said pharmaceutical composition comprises a calcium channel inhibitor.

16. The pharmaceutical composition of claim 15, wherein said calcium channel inhibitor is a dihydropyridine.

17. The pharmaceutical composition of claim 16, wherein said dihydropyridine is selected from the group consisting of nifedipine and nicardipine.

18. The pharmaceutical composition of any one of claims 1-17, wherein said pharmaceutical composition comprises a magnesium salt.

19. The pharmaceutical composition of claim 18, wherein said magnesium salt is magnesium sulfate.

20. The pharmaceutical composition of any one of claims 1-19, wherein said pharmaceutical composition comprises a nitric oxide donor.

21. The pharmaceutical composition of claim 20, wherein said nitric oxide donor is nitroglycerine.

22. The pharmaceutical composition of any one of claims 1-21, wherein said pharmaceutical composition comprises progesterone or 17-α-hydroxyprogesterone caproate.

23. The pharmaceutical composition of any one of claims 1-22, wherein said pharmaceutical composition comprises a corticosteroid.

24. The pharmaceutical composition of claim 23, wherein said corticosteroid is selected from the group consisting of betamethasone, dexamethasone, and hydrocortisone.

25. The pharmaceutical composition of any one of claims 1-24, wherein said pharmaceutical composition comprises the compound represented by formula (I) or a pharmaceutically acceptable salt thereof and nifedipine.

26. The pharmaceutical composition of claim 25, wherein said compound is represented by formula (III).

27. The pharmaceutical composition of any one of claims 1-26, wherein said pharmaceutical composition comprises the compound represented by formula (I) or a pharmaceutically acceptable salt thereof and atosiban.

28. The pharmaceutical composition of claim 27, wherein said compound is represented by formula (III).

29. The pharmaceutical composition of any one of claims 1-28, wherein said compound binds human prostaglandin F2α receptor with an affinity of about 1 nM.

30. The pharmaceutical composition of any one of claims 1-29, wherein said compound is soluble in aqueous solution at a concentration of from about 300 µg/mL to about 500 µg/mL.

31. The pharmaceutical composition of claim 30, wherein said compound is soluble in aqueous solution at a concentration of about 380 µg/mL.

32. The pharmaceutical composition of any one of claims 1-31, wherein said compound inhibits synthesis of inositol trisphosphate in a cell.

33. The pharmaceutical composition of claim 32, wherein said cell is a mammalian cell.

34. The pharmaceutical composition of claim 33, wherein said mammalian cell is a human cell.

35. The pharmaceutical composition of claim 34, wherein said human cell is a myometrial cell.

36. The pharmaceutical composition of claim 35, wherein said myometrial cell is a uterine myocyte.

37. The pharmaceutical composition of any one of claims 1-36, wherein said compound induces a reduction in the amplitude of uterine contractions in a subject following administration of said compound to said subject.

38. The pharmaceutical composition of claim 37, wherein said reduction is by from about 40% to about 50% relative to a measurement of the amplitude of uterine contractions in said subject recorded prior to said administration.

39. The pharmaceutical composition of any one of claims 1-38, wherein said compound exhibits a half life in a subject of from about 1 hour to about 4 hours following administration of said compound to said subject.

40. The pharmaceutical composition of any one of claims 1-39, wherein said compound reaches a maximum plasma concentration in a subject within from about 0.25 hours to about 2 hours following administration of said compound to said subject.

41. The pharmaceutical composition of any one of claims 37-40, wherein said subject is a mammal.

42. The pharmaceutical composition of claim 41, wherein said mammal is a human.

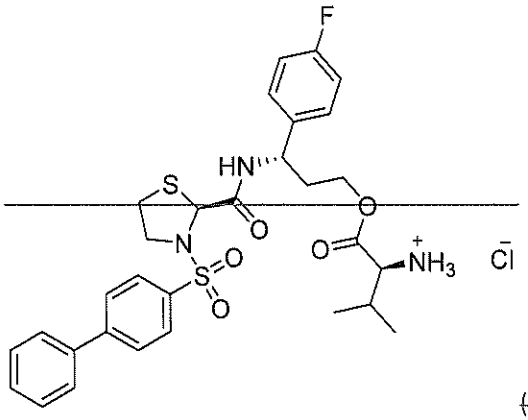
43. The pharmaceutical composition of claim 41, wherein said mammal is a canine.

44. The pharmaceutical composition of claim 41, wherein said mammal is a rat.

45. The pharmaceutical composition of any one of claims 37-44, wherein said administration is oral.

46. The pharmaceutical composition of any one of claims 37-44, wherein said administration is intravenous.

47. The pharmaceutical composition of any one of claims 1-46, wherein said compound is represented by formula (III)



(III)

and said compound is in a crystalline state.

48. The pharmaceutical composition of claim 47, wherein said compound exhibits characteristic X-ray powder diffraction peaks at about 7.0° 2θ, about 8.1° 2θ, about 10.0° 2θ, about 20.1° 2θ, about 21.0° 2θ, and about 23.5° 2θ.

49. The pharmaceutical composition of claim 48, wherein said compound additionally exhibits X-ray powder diffraction peaks at about 12.0° 2θ, about 13.1° 2θ, about 14.1° 2θ, about 16.4° 2θ, about 18.4° 2θ, and about 29.5° 2θ.

50. The pharmaceutical composition of any one of claims 47-49, wherein said compound is characterized by an X-ray powder diffraction spectrum substantially as depicted in any one of Figures 19, 22, 29, 45-49, and 54.

51. The pharmaceutical composition of claim 50, wherein said compound is characterized by an X-ray powder diffraction spectrum substantially as depicted in Figure 49.

52. The pharmaceutical composition of any one of claims 47-51, wherein said compound exhibits ^{1}H nuclear magnetic resonance (NMR) peaks centered at about 1.1 ppm, about 3.3 ppm, about 4.9 ppm, about 5.4 ppm, about 7.1 ppm, about 7.7 ppm, about 7.9 ppm, and about 8.0 ppm.

53. The pharmaceutical composition of any one of claims 47-52, wherein said compound is characterized by a ^{1}H NMR spectrum substantially as depicted in Figure 21.

54. The pharmaceutical composition of any one of claims 47-53, wherein said compound exhibits an endotherm at from about 145° C to about 147° C as measured by differential scanning calorimetry.

55. The pharmaceutical composition of claim 54, wherein said compound exhibits an additional endotherm at about 214° C as measured by differential scanning calorimetry.

56. The pharmaceutical composition of claim 55, wherein said compound is characterized by a differential scanning calorimetry curve substantially as depicted in Figure 20.

57. The pharmaceutical composition of claim 54, wherein said compound exhibits an additional endotherm at about 228° C as measured by differential scanning calorimetry.

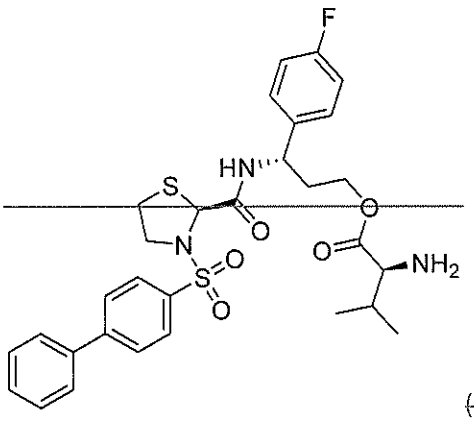
58. The pharmaceutical composition of claim 57, wherein said compound is characterized by a differential scanning calorimetry curve substantially as depicted in Figure 23.

59. The pharmaceutical composition of any one of claims 47-58, wherein said compound exhibits a weight loss of from about 0.2% to about 0.6% when heated from 25° C to 100° C as measured by thermogravimetric analysis.

~~60. The pharmaceutical composition of any one of claims 47-59, wherein said compound exhibits a weight loss of from about 2.5% to about 3.5% when heated from 100° C to 160° C as measured by thermogravimetric analysis.~~

~~61. The pharmaceutical composition of any one of claims 47-60, wherein said compound exhibits a thermogravimetric analysis curve substantially as depicted in Figure 24.~~

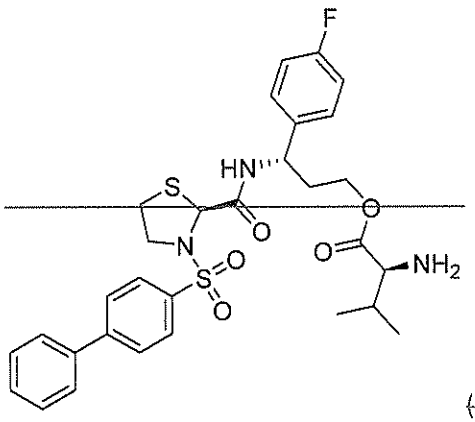
~~62. A method of treating or preventing preterm labor in a subject, said method comprising administering to said subject a therapeutically effective amount of a compound represented by formula (I)~~



~~(I)~~

~~or a pharmaceutically acceptable salt thereof and an additional therapeutic agent.~~

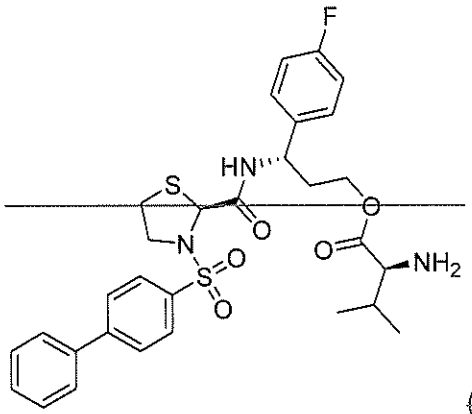
~~63. A method of preventing labor prior to cesarean delivery in a subject, said method comprising administering to said subject a therapeutically effective amount of a compound represented by formula (I)~~



(I)

or a pharmaceutically acceptable salt thereof and an additional therapeutic agent.

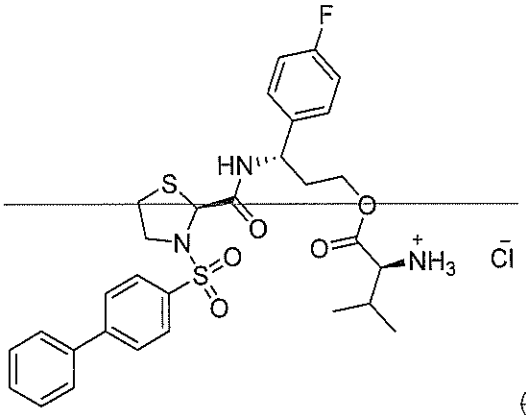
64. A method of treating or preventing dysmenorrhea in a subject, said method comprising administering to said subject a therapeutically effective amount of a compound represented by formula (I)



(I)

or a pharmaceutically acceptable salt thereof and an additional therapeutic agent.

65. The method of any one of claims 62-64, wherein said compound is represented by formula (III).



(III)

66. The method of any one of claims 62-65, wherein said additional therapeutic agent is an additional tocolytic agent.

67. A method of treating or preventing preterm labor in a subject, said method comprising administering to said subject a therapeutically effective amount of the pharmaceutical composition of any one of claims 1-61.

68. A method of preventing labor prior to cesarean delivery in a subject, said method comprising administering to said subject a therapeutically effective amount of the pharmaceutical composition of any one of claims 1-61.

69. A method of treating or preventing dysmenorrhea in a subject, said method comprising administering to said subject a therapeutically effective amount of the pharmaceutical composition of any one of claims 1-61.

70. The method of any one of claims 62-69, wherein said compound binds human prostaglandin F2α receptor with an affinity of about 1 nM.

71. The method of any one of claims 62-70, wherein said compound is soluble in aqueous solution at a concentration of from about 300 µg/mL to about 500 µg/mL.

72. The method of claim 71, wherein said compound is soluble in aqueous solution at a concentration of about 380 µg/mL.

73. The method of any one of claims 62-72, wherein said compound inhibits synthesis of inositol trisphosphate in a cell.

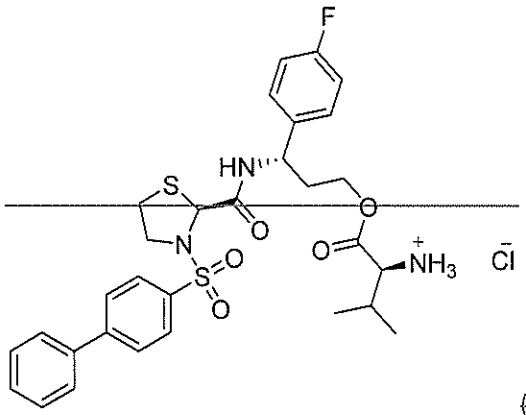
74. The method of claim 73, wherein said cell is a mammalian cell.

75. The method of claim 74, wherein said mammalian cell is a human cell.

76. The method of claim 75, wherein said human cell is a myometrial cell.

77. The method of claim 76, wherein said myometrial cell is a uterine myocyte.

185 78. The method of any one of claims 62-77, wherein said compound is represented by formula (III)



(III)

and said compound is in a crystalline state.

79. The method of claim 78, wherein said compound exhibits characteristic X-ray powder
190 diffraction peaks at about 7.0° 2θ, about 8.1° 2θ, about 10.0° 2θ, about 20.1° 2θ, about 21.0° 2θ, and about 23.5° 2θ.

80. The method of claim 79, wherein said compound additionally exhibits X-ray powder diffraction peaks at about 12.0° 2θ, about 13.1° 2θ, about 14.1° 2θ, about 16.4° 2θ, about 18.4° 2θ, and about 29.5° 2θ.

195 81. The method of any one of claims 78-80, wherein said compound is characterized by an X-ray powder diffraction spectrum substantially as depicted in any one of Figures 19, 22, 29, 45-49, and 54.

82. The method of claim 81, wherein said compound is characterized by an X-ray powder diffraction spectrum substantially as depicted in Figure 49.

83. The method of any one of claims 78-82, wherein said compound exhibits ^{1}H nuclear magnetic resonance (NMR) peaks centered at about 1.1 ppm, about 3.3 ppm, about 4.9 ppm, about 5.4 ppm, about 7.1 ppm, about 7.7 ppm, about 7.9 ppm, and about 8.0 ppm.

84. The method of any one of claims 78-83, wherein said compound is characterized by a ^{1}H NMR spectrum substantially as depicted in Figure 21.

85. The method of any one of claims 78-84, wherein said compound exhibits an endotherm at from about 145° C to about 147° C as measured by differential scanning calorimetry.

86. The method of claim 85, wherein said compound exhibits an additional endotherm at about 214° C as measured by differential scanning calorimetry.

87. The method of claim 86, wherein said compound is characterized by a differential scanning calorimetry curve substantially as depicted in Figure 20.

88. The method of claim 85, wherein said compound exhibits an additional endotherm at about 228° C as measured by differential scanning calorimetry.

89. The method of claim 88, wherein said compound is characterized by a differential scanning calorimetry curve substantially as depicted in Figure 23.

90. The method of any one of claims 78-89, wherein said compound exhibits a weight loss of from about 0.2% to about 0.6% when heated from 25° C to 100° C as measured by thermogravimetric analysis.

91. The method of any one of claims 78-90, wherein said compound exhibits a weight loss of from about 2.5% to about 3.5% when heated from 100° C to 160° C as measured by thermogravimetric analysis.

92. The method of any one of claims 78-91, wherein said compound exhibits a thermogravimetric analysis curve substantially as depicted in Figure 24.

93. The method of any one of claims 62-92, wherein said subject is characterized by a gestational age of from about 24 weeks to about 34 weeks.

94. The method of any one of claims 62-93, wherein the subject exhibits a reduction in the amplitude of uterine contractions following said administering.

95. The method of claim 94, wherein said reduction is by from about 40% to about 50% relative to a measurement of the amplitude of uterine contractions in said subject recorded prior to said administering.

96. The method of any one of claims 62-95, wherein said compound exhibits a half-life of from about 1 hour to about 4 hours in said subject.

97. The method of any one of claims 62-96, wherein said compound reaches a maximum plasma concentration in said subject within from about 0.25 hours to about 2 hours of said administering.

98. The method of any one of claims 62-97, wherein said subject is a mammal.

99. The method of claim 98, wherein said mammal is a human.

100. The method of any one of claims 62-99, said method comprising orally administering said compound or pharmaceutical composition to said subject.

101. The method of any one of claims 62-99, said method comprising intravenously administering said compound or pharmaceutical composition to said subject.

102. The method of any one of claims 62-101, said method comprising administering to said subject an oxytocin receptor antagonist.

103. The method of claim 102, said method comprising orally administering said oxytocin receptor antagonist to said subject.

104. The method of claim 102, said method comprising intravenously administering said oxytocin receptor antagonist to said subject.

105. The method of any one of claims 102-104, wherein said oxytocin receptor antagonist is selected form the group consisting of atosiban, retosiban, barusiban, epelsiban, and nolasiban.

106. The method of any one of claims 62-105, said method comprising administering to said subject a betamimetic.

~~107. The method of claim 106, said method comprising orally administering said betamimetic to said subject.~~

~~108. The method of claim 106, said method comprising intravenously administering said betamimetic to said subject.~~

~~109. The method of any one of claims 106-108, wherein said betamimetic is selected form the group consisting of terbutaline, ritodrine, hexoprenaline, albuterol, fenoterol, nylidrin, and orciprenaline.~~

~~110. The method of any one of claims 62-109, said method comprising administering to said subject a calcium channel inhibitor.~~

~~111. The method of claim 110, said method comprising orally administering said calcium channel inhibitor to said subject.~~

~~112. The method of claim 110, said method comprising intravenously administering said calcium channel inhibitor to said subject.~~

~~113. The method of any one of claims 110-112, wherein said calcium channel inhibitor is a dihydropyridine.~~

~~114. The method of claim 113, wherein said dihydropyridine is selected from the group consisting of nifedipine and nicardipine.~~

~~115. The method of any one of claims 62-114, said method comprising administering to said subject a magnesium salt.~~

~~116. The method of claim 115, said method comprising orally administering said magnesium salt to said subject.~~

~~117. The method of claim 115, said method comprising intravenously administering said magnesium salt to said subject.~~

~~118. The method of claim 115, said method comprising intramuscularly administering said magnesium salt to said subject.~~

~~119. The method of any one of claims 115-118, wherein said magnesium salt is magnesium sulfate.~~

~~120. The method of any one of claims 62-119, said method comprising administering to said subject a nitric oxide donor.~~

~~121. The method of claim 120, said method comprising orally administering said nitric oxide donor to said subject.~~

~~122. The method of claim 120, said method comprising intravenously administering said nitric oxide donor to said subject.~~

~~123. The method of any one of claims 120-122, wherein said nitric oxide donor is nitroglycerine.~~

~~124. The method of any one of claims 62-123, said method comprising administering to said subject progesterone or 17-α-hydroxyprogesterone caproate.~~

~~125. The method of claim 124, said method comprising orally administering said progesterone or 17-α-hydroxyprogesterone caproate to said subject.~~

~~126. The method of claim 124, said method comprising intravaginally administering said progesterone or 17-α-hydroxyprogesterone caproate to said subject.~~

~~127. The method of any one of claims 62-126, said method comprising administering to said subject a corticosteroid.~~

~~128. The method of claim 127, said method comprising orally administering said corticosteroid to said subject.~~

~~129. The method of claim 127, said method comprising intramuscularly administering said corticosteroid to said subject.~~

~~130. The method of any one of claims 127-129, wherein said corticosteroid is selected from the group consisting of betamethasone, dexamethasone, and hydrocortisone.~~

131. The method of any one of claims 62-130, said method comprising administering to said subject a therapeutically effective amount of a compound represented by formula (I) or a pharmaceutically acceptable salt thereof and nifedipine.

132. The method of claim 131, wherein said compound is represented by formula (III).

133. The method of any one of claims 62-132, said method comprising administering to said subject a therapeutically effective amount of a compound represented by formula (I) or a pharmaceutically acceptable salt thereof and atosiban.

134. The method of claim 133, wherein said compound is represented by formula (III).

135. A kit comprising the pharmaceutical composition of any one of claims 1-61 and a package insert

136. The kit of claim 135, wherein said package insert instructs a user of said kit to administer said compound or pharmaceutical composition to a subject experiencing or at risk of undergoing preterm labor.

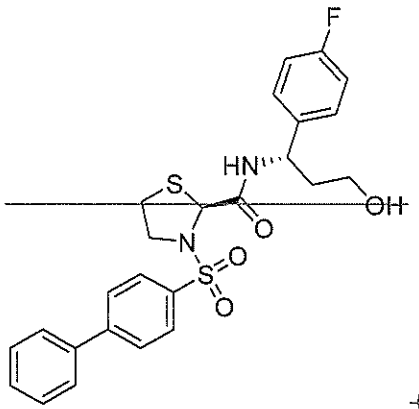
137. The kit of claim 136, wherein said subject is characterized by a gestational age of from about 24 weeks to about 34 weeks.

138. The kit of any one of claims 135-137, wherein said package insert instructs a user of said kit to mix said compound or pharmaceutical composition with an aqueous solution.

139. The kit of any one of claims 136-138, wherein said package insert instructs a user of said kit to orally administer said compound or pharmaceutical composition to said subject.

140. The kit of any one of claims 136-138, wherein said package insert instructs a user of said kit to intravenously administer said compound or pharmaceutical composition to said subject.

141. A pharmaceutical composition comprising a compound represented by formula (II)



(II)

wherein said pharmaceutical composition further comprises an additional therapeutic agent.

142. The pharmaceutical composition of claim 141, wherein said additional therapeutic agent is an additional tocolytic agent.

143. The pharmaceutical composition of claim 141 or 142, wherein said pharmaceutical composition comprises one or more excipients.

144. The pharmaceutical composition of any one of claims 141-143, wherein said compound has a purity of at least 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or 99.9%.

145. The pharmaceutical composition of claim 144, wherein said purity is ascertained by high pressure liquid chromatography (HPLC).

146. The pharmaceutical composition of claim 144, wherein said purity is ascertained by NMR spectroscopy.

147. The pharmaceutical composition of any one of claims 141-146, wherein said compound or pharmaceutical composition is formulated for oral administration to a subject.

148. The pharmaceutical composition of any one of claims 141-147, wherein said compound or pharmaceutical composition is a tablet, capsule, gel cap, powder, liquid solution, or liquid suspension.

~~149. The pharmaceutical composition of any one of claims 141-146, wherein said compound or pharmaceutical composition is formulated for intravenous administration to a subject.~~

~~150. The pharmaceutical composition of any one of claims 141-149, wherein said pharmaceutical composition comprises an oxytocin receptor antagonist.~~

~~151. The pharmaceutical composition of claim 150, wherein said oxytocin receptor antagonist is selected form the group consisting of atosiban, retosiban, barusiban, epelsiban, and nolasiban.~~

~~152. The pharmaceutical composition of any one of claims 141-151, wherein said pharmaceutical composition comprises a betamimetic.~~

~~153. The pharmaceutical composition of claim 152, wherein said betamimetic is selected from the group consisting of terbutaline, ritodrine, hexoprenaline, albuterol, fenoterol, nylidrin, and orciprenaline.~~

~~154. The pharmaceutical composition of any one of claims 141-153, wherein said pharmaceutical composition comprises a calcium channel inhibitor.~~

~~155. The pharmaceutical composition of claim 154, wherein said calcium channel inhibitor is a dihydropyridine.~~

~~156. The pharmaceutical composition of claim 155, wherein said dihydropyridine is selected from the group consisting of nifedipine and nicardipine.~~

~~157. The pharmaceutical composition of any one of claims 141-156, wherein said pharmaceutical composition comprises a magnesium salt.~~

~~158. The pharmaceutical composition of claim 157, wherein said magnesium salt is magnesium sulfate.~~

~~159. The pharmaceutical composition of any one of claims 141-158, wherein said pharmaceutical composition comprises a nitric oxide donor.~~

~~160. The pharmaceutical composition of claim 159, wherein said nitric oxide donor is nitroglycerine.~~

~~161. The pharmaceutical composition of any one of claims 141-160, wherein said pharmaceutical composition comprises progesterone or 17-α-hydroxyprogesterone caproate.~~

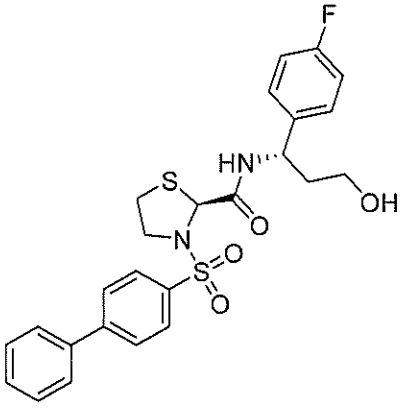
~~162. The pharmaceutical composition of any one of claims 141-161, wherein said pharmaceutical composition comprises a corticosteroid.~~

~~163. The pharmaceutical composition of claim 162, wherein said corticosteroid is selected from the group consisting of betamethasone, dexamethasone, and hydrocortisone.~~

~~164. The pharmaceutical composition of any one of claims 141-163, wherein said pharmaceutical composition comprises the compound represented by formula (II) and nifedipine.~~

~~165. The pharmaceutical composition of any one of claims 141-164, wherein said pharmaceutical composition comprises the compound represented by formula (II) and atosiban.~~

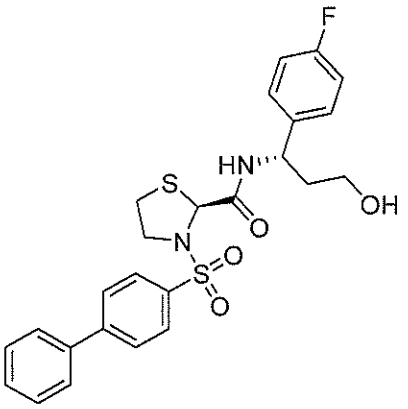
~~166.~~1. ~~A method of treating or preventing preterm labor in a subject, said method comprising providing to said subject a therapeutically effective amount~~Use of a compound represented by formula (**II**)



(II)

in the manufacture of a medicament for treating or preventing preterm labor in a human patient, wherein the compound is to be provided to the patient with~~and~~ an additional therapeutic agent.

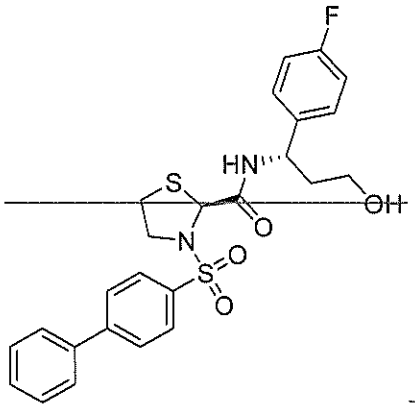
~~167.~~2. ~~A method of preventing labor prior to cesarean delivery in a subject, said method comprising providing to said subject a therapeutically effective amount~~Use of a compound represented by formula (**II**)



(II)

in the manufacture of a medicament for preventing labor prior to cesarean delivery in a human patient, wherein the compound is to be provided to the patient with~~and~~ an additional therapeutic agent.

~~168. A method of treating or preventing dysmenorrhea in a subject, said method comprising providing to said subject a therapeutically effective amount of a compound represented by formula (II)~~



~~(II)~~

~~and an additional therapeutic agent.~~

~~169.~~3. The ~~method of any one~~use of claims ~~166-168~~ or 2, wherein said additional therapeutic agent is an additional tocolytic agent.

~~170. A method of treating or preventing preterm labor in a subject, said method comprising providing to said subject a therapeutically effective amount of the pharmaceutical composition of any one of claims 141-165.~~

~~171. A method of preventing labor prior to cesarean delivery in a subject, said method comprising providing to said subject a therapeutically effective amount of the pharmaceutical composition of any one of claims 141-165.~~

~~172. A method of treating or preventing dysmenorrhea in a subject, said method comprising providing to said subject a therapeutically effective amount of the pharmaceutical composition of any one of claims 141-165.~~

~~173. The method of any one of claims 166-172, wherein said subject is characterized by a gestational age of from about 24 weeks to about 34 weeks.~~

~~174. The method of any one of claims 166-173, wherein the subject exhibits a reduction in the amplitude of uterine contractions following said providing.~~

~~175. The method of claim 174, wherein said reduction is by from about 40% to about 50% relative to a measurement of the amplitude of uterine contractions in said subject recorded prior to said providing.~~

~~176. The method of any one of claims 166-175, wherein said subject is a mammal.~~

~~177. The method of claim 176, wherein said mammal is a human.~~

~~178. The method of any one of claims 166-177, said method comprising orally administering said compound or pharmaceutical composition to said subject.~~

~~179. The method of any one of claims 166-177, said method comprising intravenously administering said compound or pharmaceutical composition to said subject.~~

~~180.~~4. The ~~method of any one~~use of claims ~~166-179~~3, wherein the tocolytic agent is~~said method comprising administering to said subject~~ an oxytocin receptor antagonist.

~~181. The method of claim 180, said method comprising orally administering said oxytocin receptor antagonist to said subject.~~

~~182. The method of claim 180, said method comprising intravenously administering said oxytocin receptor antagonist to said subject.~~

~~183.~~5. The ~~method of any one~~use of claims ~~180-182~~4, wherein said oxytocin receptor antagonist is ~~selected form the group consisting of~~ atosiban, retosiban, barusiban, epelsiban, ~~and~~ or nolasiban.

~~184. The method of any one of claims 166-183, said method comprising administering to said subject a betamimetic.~~

~~185. The method of claim 184, said method comprising orally administering said betamimetic to said subject.~~

~~186. The method of claim 184, said method comprising intravenously administering said betamimetic to said subject.~~

~~187. The method of any one of claims 184-186, wherein said betamimetic is selected form the group consisting of terbutaline, ritodrine, hexoprenaline, albuterol, fenoterol, nylidrin, and orciprenaline.~~

~~188.~~6. The ~~method of any one~~use of claims ~~166-187~~3, wherein the tocolytic agent is~~said method comprising administering to said subject~~ a calcium channel inhibitor.

~~189. The method of claim 188, said method comprising orally administering said calcium channel inhibitor to said subject.~~

~~190. The method of claim 188, said method comprising intravenously administering said calcium channel inhibitor to said subject.~~

~~191. The method of any one of claims 188-190, wherein said calcium channel inhibitor is a dihydropyridine.~~

~~192.~~7. The ~~method~~ use of claim ~~1916~~, wherein the calcium channel inhibitor is~~said dihydropyridine is selected from the group consisting of~~ nifedipine ~~and~~ or nicardipine.

~~193. The method of any one~~use of claims ~~166-19~~ or 2, wherein the additional therapeutic agent is a betamimetic, ~~said method comprising administering to said subject~~ a magnesium salt~~,~~.

~~194. The method of claim 193, said method comprising orally administering said magnesium salt to said subject.~~

~~195. The method of claim 193, said method comprising intravenously administering said magnesium salt to said subject.~~

~~196. The method of claim 193, said method comprising intramuscularly administering said magnesium salt to said subject.~~

~~197. The method of any one of claims 166-196, wherein said magnesium salt is magnesium sulfate.~~

~~198. The method of any one of claims 166-197, said method comprising administering to said subject~~ a nitric oxide donor~~,~~.

~~199. The method of claim 198, said method comprising orally administering said nitric oxide donor to said subject.~~

~~200. The method of claim 198, said method comprising intravenously administering said nitric oxide donor to said subject.~~

~~201. The method of any one of claims 198-200, wherein said nitric oxide donor is nitroglycerine.~~

~~202. The method of any one of claims 166-201, said method comprising administering to said subject~~ progesterone or ~~17-α-hydroxyprogesterone caproate~~a variant thereof, or ~~,~~

~~203. The method of claim 202, said method comprising orally administering said progesterone or 17-α-hydroxyprogesterone caproate to said subject.~~

~~204. The method of claim 202, said method comprising intravaginally administering said progesterone or 17-α-hydroxyprogesterone caproate to said subject.~~

~~205.~~8. ~~The method of any one of claims 166-204, said method comprising administering to said subject~~ a corticosteroid.

~~206. The method of claim 205, said method comprising orally administering said corticosteroid to said subject.~~

~~207. The method of claim 205, said method comprising intramuscularly administering said corticosteroid to said subject.~~

9. The use of claim 1 or 2, wherein the additional therapeutic agent is a betamimetic selected from the group consisting of terbutaline, ritodrine, hexoprenaline, albuterol, fenoterol, nylidrin, and orciprenaline.

10. The use of claim 1 or 2, wherein the additional therapeutic agent is magnesium sulfate.

11. The use of claim 1 or 2, wherein the additional therapeutic agent is nitroglycerine.

12. The use of claim 1 or 2, wherein the additional therapeutic agent is progesterone or 17-*a*-hydroxyprogesterone caproate.

208.13. The method of any oneuse of claims 1 or 2205-207, wherein said corticosteroid is selected from the group consisting of betamethasone, dexamethasone, and hydrocortisone.

209. The method of any one of claims 166-208, said method comprising providing to said subject a therapeutically effective amount of the compound represented by formula (II) and nifedipine.

210. The method of any one of claims 166-208, said method comprising providing to said subject a therapeutically effective amount of the compound represented by formula (II) and atosiban.

211. A kit comprising the pharmaceutical composition of any one of claims 141-165 and a package insert.

212. The kit of claim 211, wherein said package insert instructs a user of said kit to administer said compound or pharmaceutical composition to a subject experiencing or at risk of undergoing preterm labor.

213.14. The kit use of claim 1 or 2212, wherein said subjectthe patient is characterized by a gestational age of from about 24 weeks to about 34 weeks.

214. The kit of any one of claims 211-213, wherein said package insert instructs a user of said kit to mix said compound or pharmaceutical composition with an aqueous solution.

215. The kit of any one of claims 211-213, wherein said package insert instructs a user of said kit to orally administer said compound or pharmaceutical composition to said subject.

216. The kit of any one of claims 211-213, wherein said package insert instructs a user of said kit to intravenously administer said compound or pharmaceutical composition to said subject