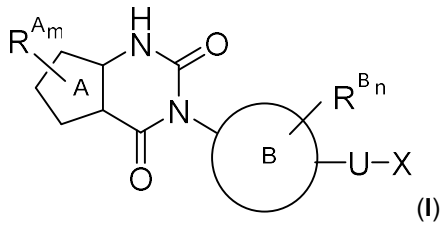
CLAIMS

1. Use of a gonadotropin-releasing hormone (GnRH) antagonist in the manufacture of a medicament for use in a method of treating an estrogen-dependent disease in a human patient in need thereof, the method comprising administering to the patient a therapeutically effective amount of the GnRH antagonist over the course of a treatment period having a duration of at least 52 weeks.

2. The use of claim 1, wherein the estrogen-dependent disease is uterine fibroids or endometriosis.

3. The use of claim 1 or 2, wherein the GnRH antagonist is a compound represented by formula (**I**)



(**I**)

wherein ring A is a thiophene ring;

each R^A is independently a halogen atom, a cyano group, a nitro group, an optionally substituted lower alkyl group, an optionally substituted lower alkenyl group, an optionally substituted lower alkynyl group, a hydroxyiminomethyl group, an optionally substituted sulfonyl group, an optionally substituted sulfinyl group, a tetrazolyl group, OW^1, SW^1, COW^1, $COOW^1$, $NHCOW^1$, $NHCONW^2W^3$, NW^2W^3, $CONW^2W^3$, or $SO_2NW^2W^3$, wherein W^1 to W^3 independently are a hydrogen atom or an optionally substituted lower alkyl group, or W^2 and W^3 may bind together with the neighboring nitrogen atom to form an optionally substituted cyclic amino group;

m is an integer from 0 to 3;

ring B is an aryl group or a monocyclic heteroaryl group;

each R^B is independently a halogen atom, a cyano group, an optionally substituted lower alkyl group, OW^4, COW^4, $COOW^4$, or $CONW^5W^6$, wherein W^4 to W^6 independently are a hydrogen atom or an optionally substituted lower alkyl group, or W^5 and W^6 may bind together with the neighboring nitrogen atom to form an optionally substituted cyclic amino group;

n is an integer from 0 to 2;

U is a single bond;

X is a group represented by —S—L—Y, —O—L—Y, —CO—L—Y, or —SO_2—L—Y, wherein L is an optionally substituted lower alkylene group;

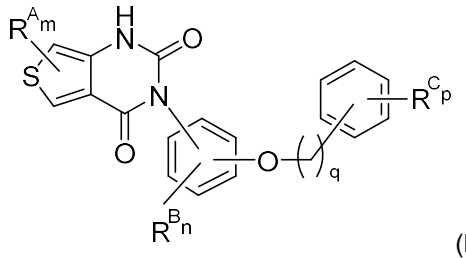
Y is a group represented by Z or —NW^7W^8, wherein W^7 and W^8 independently are a hydrogen atom, an optionally substituted lower alkyl group, or Z with the proviso that W^7 and W^8 are not simultaneously hydrogen atoms, or W^7 and W^8 may bind together with the neighboring nitrogen atom to form an optionally substituted cyclic amino group; and

Z is an optionally fused and optionally substituted cycloalkyl group, an optionally fused and

optionally substituted heterocycloalkyl group, an optionally fused and optionally substituted aryl group, or an optionally fused and optionally substituted heteroaryl group;

or a pharmaceutically acceptable salt thereof.

4. The use of claim 3, wherein the compound is represented by formula (**Ia**)



(**Ia**)

wherein each R^A is independently a halogen atom, a cyano group, a nitro group, an optionally substituted lower alkyl group, an optionally substituted lower alkenyl group, an optionally substituted lower alkynyl group, a hydroxyiminomethyl group, an optionally substituted sulfonyl group, an optionally substituted sulfinyl group, a tetrazolyl group, OW^1, SW^1, COW^1, $COOW^1$, $NHCOW^1$, $NHCONW^2W^3$, NW^2W^3, $CONW^2W^3$, or $SO_2NW^2W^3$, wherein W^1 to W^3 independently are a hydrogen atom or an optionally substituted lower alkyl group, or W^2 and W^3 may bind together with the neighboring nitrogen atom to form an optionally substituted cyclic amino group;

m is an integer from 0 to 3;

each R^B is independently a halogen atom, a cyano group, an optionally substituted lower alkyl group, OW^4, COW^4, $COOW^4$, or $CONW^5W^6$, wherein W^4 to W^6 independently are a hydrogen atom or an optionally substituted lower alkyl group, or W^5 and W^6 may bind together with the neighboring nitrogen atom to form an optionally substituted cyclic amino group;

n is an integer from 0 to 2;

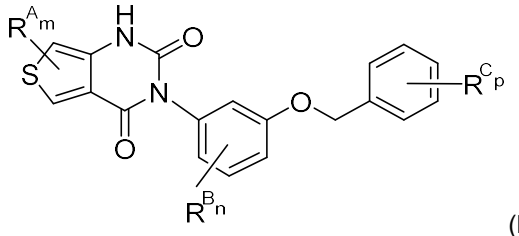
q is an integer from 0 to 3;

each R^C is independently a halogen atom, an optionally substituted lower alkyl group, or OW^9, wherein each W^9 is independently a hydrogen atom or an optionally substituted lower alkyl group; and

p is an integer from 0 to 3;

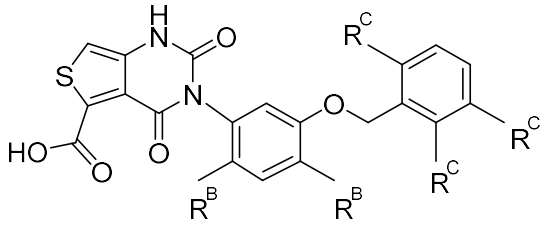
or a pharmaceutically acceptable salt thereof.

5. The use of claim 4, wherein the compound is represented by formula (**Ib**)



(**Ib**).

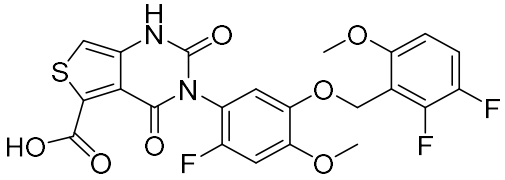
6. The use of claim 5, wherein the compound is represented by formula (**Ic**)



(**Ic**)

or a pharmaceutically acceptable salt thereof.

7. The use of claim 6, wherein the compound is represented by formula (**VI**)



(**VI**)

or a pharmaceutically acceptable salt thereof.

8. The use of claim 7, wherein the compound is the choline salt of the compound represented by formula (**VI**).

9. The use of any one of claims 1-8, the method comprising:

a) monitoring the patient's total cholesterol level after from about 6 weeks to about 52 weeks of being administered the GnRH antagonist during the treatment period;

b) determining that the patient does not exhibit an increase in total cholesterol level of greater than 10% relative to a measurement of the patient's total cholesterol level obtained prior to the treatment period; and

c) continuing to administer the GnRH antagonist to the patient for the remainder of the treatment period.

10. The use of any one of claims 1-9, the method comprising:

a) monitoring the patient's low-density lipoprotein-cholesterol level after from about 6 weeks to about 52 weeks of being administered the GnRH antagonist during the treatment period;

b) determining that the patient does not exhibit an increase in low-density lipoprotein-cholesterol level of greater than 10% relative to a measurement of the patient's low-density lipoprotein-cholesterol level obtained prior to the treatment period; and

c) continuing to administer the GnRH antagonist to the patient for the remainder of the treatment period.

11. The use of any one of claims 1-10, the method comprising:

a) monitoring the patient's ratio of low-density lipoprotein-cholesterol to high-density lipoprotein-cholesterol after from about 6 weeks to about 52 weeks of being administered the GnRH antagonist during the treatment period;

b) determining that the patient does not exhibit an increase in their ratio of low-density lipoprotein-cholesterol to high-density lipoprotein-cholesterol of greater than 10% relative to a measurement

of the patient's ratio of low-density lipoprotein-cholesterol to high-density lipoprotein-cholesterol obtained prior to the treatment period; and

c) continuing to administer the GnRH antagonist to the patient for the remainder of the treatment period.

12. The use of any one of claims 1-11, the method comprising:

a) monitoring the patient's low-density lipoprotein-cholesterol level after from about 6 weeks to about 52 weeks of being administered the GnRH antagonist during the treatment period;

b) determining that the patient does not exhibit an increase in low-density lipoprotein-cholesterol level to a level greater than 160 mg/dl; and

c) continuing to administer the GnRH antagonist to the patient for the remainder of the treatment period.

13. The use of any one of claims 1-12, the method comprising:

a) monitoring the patient's low-density lipoprotein-cholesterol level after from about 6 weeks to about 52 weeks of being administered the GnRH antagonist during the treatment period;

b) determining that the patient does not exhibit an increase in low-density lipoprotein-cholesterol level from a level less than 160 mg/dl (e.g., from a level less than 130 mg/dl) to a level greater than 190 mg/dl; and

c) continuing to administer the GnRH antagonist to the patient for the remainder of the treatment period.

14. The use of any one of claims 1-13, the method comprising:

a) monitoring the patient's serum triglyceride level after from about 6 weeks to about 52 weeks of being administered the GnRH antagonist during the treatment period;

b) determining that the patient does not exhibit an increase in serum triglyceride level of greater than 30% relative to a measurement of the patient's serum triglyceride level obtained prior to the treatment period; and

c) continuing to administer the GnRH antagonist to the patient for the remainder of the treatment period.

15. The use of any one of claims 1-14, the method comprising:

a) monitoring the patient's serum triglyceride level after from about 6 weeks to about 52 weeks of being administered the GnRH antagonist during the treatment period;

b) determining that the patient does not exhibit an increase in serum triglyceride level to a level greater than 200 mg/dl; and

c) continuing to administer the GnRH antagonist to the patient for the remainder of the treatment period.

16. The use of any one of claims 1-14, the method comprising:

a) monitoring the patient's serum triglyceride level after from about 6 weeks to about 52 weeks of being administered the GnRH antagonist during the treatment period;

b) determining that the patient does not exhibit an increase in serum triglyceride level from a level less than 300 mg/dl to a level greater than 500 mg/dl; and

c) continuing to administer the GnRH antagonist to the patient for the remainder of the treatment period.

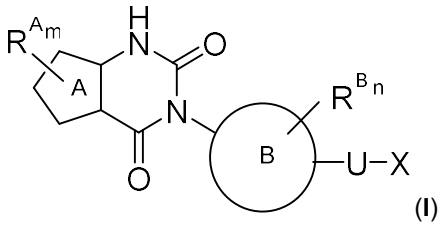
17. Use of a GnRH antagonist in the manufacture of a medicament for use in a method of treating an estrogen-dependent disease or alleviating one or more symptoms of an estrogen-dependent disease in a human patient in need thereof, the method comprising:
    a) periodically administering to the patient a therapeutically effective amount of a GnRH antagonist during a treatment period,
    b) determining that the patient does not exhibit a significant increase in total cholesterol level relative to a measurement of the patient's total cholesterol level obtained prior to the treatment period, optionally wherein the determining occurs from about 6 weeks to about 52 weeks after the onset of the treatment period, and
    c) continuing to periodically administer the GnRH antagonist to the patient for the remainder of the treatment period.

18. Use of a GnRH antagonist in the manufacture of a medicament for use in a method of treating an estrogen-dependent disease or alleviating one or more symptoms of an estrogen-dependent disease in a human patient in need thereof, the method comprising:
    a) periodically administering to the patient a therapeutically effective amount of a GnRH antagonist during a treatment period,
    b) determining that the patient does not exhibit a significant increase in low-density lipoprotein-cholesterol level relative to a measurement of the patient's low-density lipoprotein-cholesterol level obtained prior to the treatment period, optionally wherein the determining occurs from about 6 weeks to about 52 weeks after the onset of the treatment period, and
    c) continuing to periodically administer the GnRH antagonist to the patient for the remainder of the treatment period.

19. Use of a GnRH antagonist in the manufacture of a medicament for use in a method of treating an estrogen-dependent disease or alleviating one or more symptoms of an estrogen-dependent disease in a human patient in need thereof, the method comprising:
    a) periodically administering to the patient a therapeutically effective amount of a GnRH antagonist during a treatment period,
    b) determining that the patient does not exhibit a significant increase in their ratio of ratio of low-density lipoprotein-cholesterol to high-density lipoprotein-cholesterol relative to a measurement of the patient's ratio of low-density lipoprotein-cholesterol to high-density lipoprotein-cholesterol obtained prior to the treatment period, optionally wherein the determining occurs from about 6 weeks to about 52 weeks after the onset of the treatment period, and
    c) continuing to periodically administer the GnRH antagonist to the patient for the remainder of the treatment period.

20. The use of any one of claims 17-19, wherein the estrogen-dependent disease is uterine fibroids, or endometriosis,.

21. The use of any one of claims 17-20, wherein the GnRH antagonist is a compound represented by formula (**I**)



(**I**)

wherein ring A is a thiophene ring;

each R^A is independently a halogen atom, a cyano group, a nitro group, an optionally substituted lower alkyl group, an optionally substituted lower alkenyl group, an optionally substituted lower alkynyl group, a hydroxyiminomethyl group, an optionally substituted sulfonyl group, an optionally substituted sulfinyl group, a tetrazolyl group, OW^1, SW^1, COW^1, $COOW^1$, $NHCOW^1$, $NHCONW^2W^3$, NW^2W^3, $CONW^2W^3$, or $SO_2NW^2W^3$, wherein W^1 to W^3 independently are a hydrogen atom or an optionally substituted lower alkyl group, or W^2 and W^3 may bind together with the neighboring nitrogen atom to form an optionally substituted cyclic amino group;

m is an integer from 0 to 3;

ring B is an aryl group or a monocyclic heteroaryl group;

each R^B is independently a halogen atom, a cyano group, an optionally substituted lower alkyl group, OW^4, COW^4, $COOW^4$, or $CONW^5W^6$, wherein W^4 to W^6 independently are a hydrogen atom or an optionally substituted lower alkyl group, or W^5 and W^6 may bind together with the neighboring nitrogen atom to form an optionally substituted cyclic amino group;

n is an integer from 0 to 2;

U is a single bond;

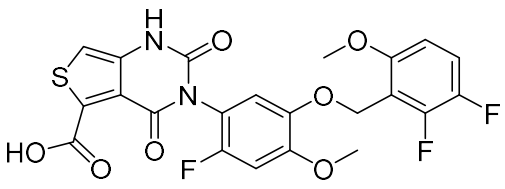
X is a group represented by —S—L—Y, —O—L—Y, —CO—L—Y, or —SO_2—L—Y, wherein L is an optionally substituted lower alkylene group;

Y is a group represented by Z or —NW^7W^8, wherein W^7 and W^8 independently are a hydrogen atom, an optionally substituted lower alkyl group, or Z with the proviso that W^7 and W^8 are not simultaneously hydrogen atoms, or W^7 and W^8 may bind together with the neighboring nitrogen atom to form an optionally substituted cyclic amino group; and

Z is an optionally fused and optionally substituted cycloalkyl group, an optionally fused and optionally substituted heterocycloalkyl group, an optionally fused and optionally substituted aryl group, or an optionally fused and optionally substituted heteroaryl group;

or a pharmaceutically acceptable salt thereof.

22. The use of claim 21, wherein the compound is represented by formula (**VI**)



(**VI**)

or a pharmaceutically acceptable salt thereof.

23. The use of claim 22, wherein the compound is the choline salt of the compound represented by formula (**VI**).