WHAT IS CLAIMED IS:

1. ~~A method~~Use of a PI4KIIIα/FAM126/TTC7 complex inhibitor in the manufacture of a medicament for preventing or treating a mood disorder, ~~comprising administering~~wherein an effective amount of the PI4KIIIα/FAM126/TTC7 complex inhibitor is to be administered to a subject in need thereof, and wherein the mood disorder is an anxious mood or depressed mood.

2. The ~~method~~use according to claim 1, wherein the PI4KIIIα/FAM126/TTC7 complex inhibitor is a small-molecule compound, an antibody, an RNAi molecule, or an antisense nucleic acid.

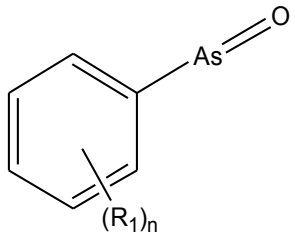
3. The ~~method~~use according to claim 1, wherein the PI4KIIIα/FAM126/TTC7 complex inhibitor is an EFR3-specific inhibitor.

4. The ~~method~~use according to claim 3, wherein the EFR3-specific inhibitor is an EFR3a-specific inhibitor or an EFR3b-specific inhibitor.

5. The ~~method~~use according to claim 1, wherein the PI4KIIIα/FAM126/TTC7 complex inhibitor is a PI4KIIIα-specific inhibitor.

6. The ~~method~~use according to claim 5, wherein the PI4KIIIα-specific inhibitor is a small-molecule compound.

7. The ~~method~~use according to claim 2 or 6, wherein the small-molecule compound has a structure of formula (I) or a pharmaceutically acceptable salt thereof,



formula (I)

wherein R_1 is independently selected from

(a) H, deuterium, halogen, nitro, cyano, hydroxyl, amino, carbamoyl, C_{1-6} alkyl, C_{2-6} alkynyl, C_{2-6} alkenyl, C_{1-6} alkoxy, C_{1-6} haloalkyl, C_{1-6} alkylene-NH_2, C_{1-6} alkylene-NH-C(O)H, -As(O), -N=NH, -NH-(C_{1-6} alkyl), N,N-(C_{1-6} alkyl)$_2$, -NH-C(O)H, -NH-$S(O)_2$H, -C(O)OH, -OC(O)H, -SH, -$S(O)_2$H, -$S(O)_2$-NH, or

heterocyclyl, which is optionally substituted by R_2 or R_3, wherein R_2 and R_3 are each independently selected from amino, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-6} haloalkyl, -NH-(C_{1-6} alkyl), -NH-(6- to 12-membered aryl), -N,N-(C_{1-6} alkyl)$_2$, C_{3-6} cycloalkyl, 6- to 12-membered aryl, or 3- to 12-membered heterocyclyl, which is optionally substituted by one or more of halogen, nitro, cyano, hydroxyl, amino, carbamoyl, -NH-C(O)-R_5, -C(O)OR_4, 6- to 12-membered aryl, C_{1-6} alkyl, C_{2-6} alkynyl, C_{2-6} alkenyl, C_{1-6} alkoxy, C_{1-6} haloalkyl, 3- to 6-membered heterocyclyl, C_{3-6} cycloalkyl, or Bn-O-, and R_4 is C_{1-6} alkyl, which is optionally substituted by one or more of halogen, nitro, cyano, hydroxyl, amino, carbamoyl, 6- to 12-membered aryl, C_{1-6} alkyl, C_{2-6} alkynyl, C_{2-6} alkenyl, C_{1-6} alkoxy, C_{1-6} haloalkyl, 3- to 6-membered heterocyclyl, C_{3-6} cycloalkyl, or Bn-O-, and R_5 is selected from H, C_{1-6} alkyl, C_{2-6} alkynyl, C_{2-6} alkenyl, C_{1-6} alkoxy, or C_{1-6} haloalkyl, or

(b) R_1 on two adjacent carbon atoms forms 5- to 12-membered cycloalkyl, aryl, or heterocyclyl, which is optionally substituted by one or more of halogen, nitro, cyano, hydroxyl, amino, carbamoyl, 6- to 12-membered aryl, C_{1-6} alkyl, C_{2-6} alkynyl, C_{2-6} alkenyl, C_{1-6} alkoxy, C_{1-6} haloalkyl, 3- to 6-membered heterocyclyl, C_{3-6} cycloalkyl, or Bn-O-,

wherein n is an integer from 0 to 5.

8. The ~~method~~use according to claim 7, wherein R_1 is each independently selected from H, deuterium, halogen, nitro, cyano, hydroxyl, amino, carbamoyl, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-6} haloalkyl, -As(O), -NH-(C_{1-6} alkyl), -N,N-(C_{1-6} alkyl)$_2$, or -C(O)OR_6, wherein n is an integer from 0 to 2, and R_6 is C_{1-6} alkyl.

9. The ~~method~~use according to claim 7, wherein R_1 is each independently selected from H, deuterium, halogen, nitro, cyano, hydroxyl, amino, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-6} haloalkyl, or -As(O), wherein n is an integer from 0 to 2.

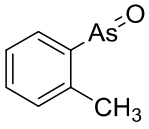
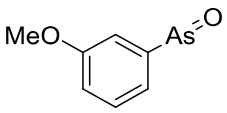
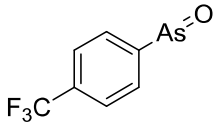
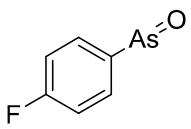
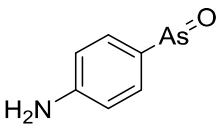
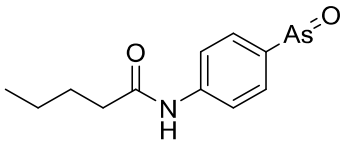
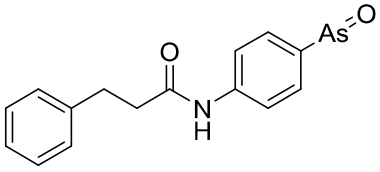
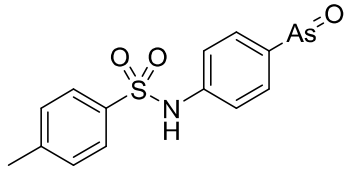
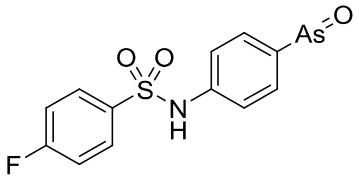
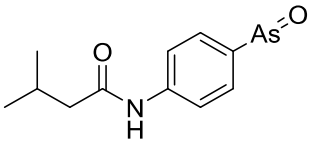
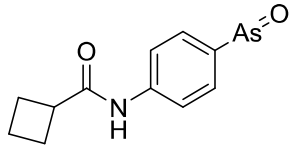
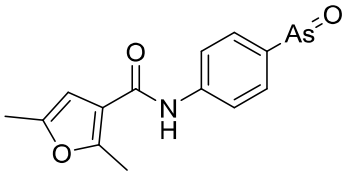
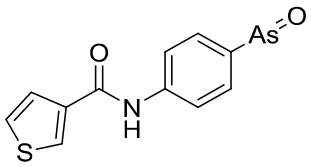
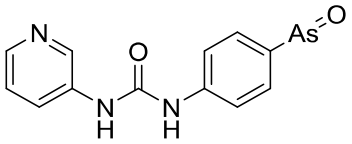
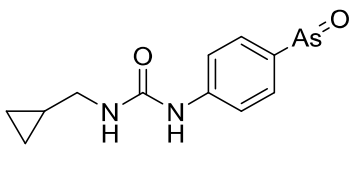
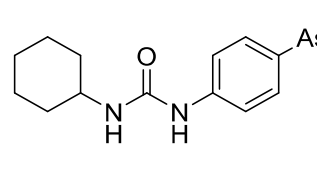
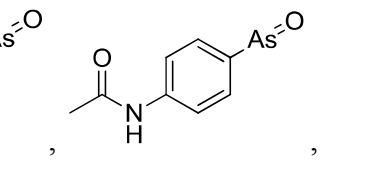
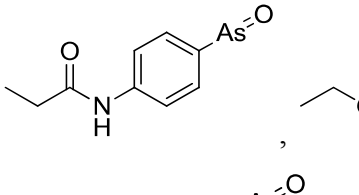
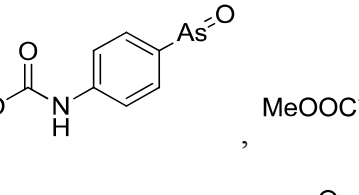
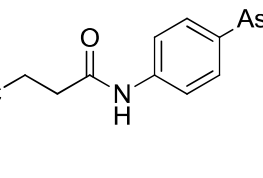
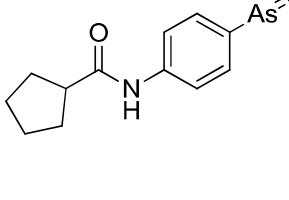
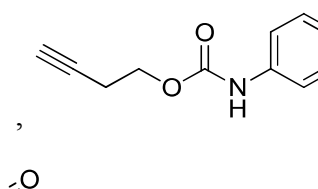
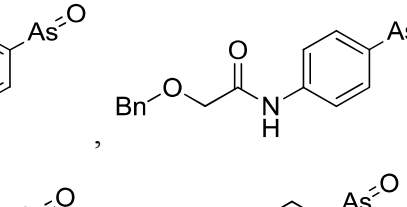
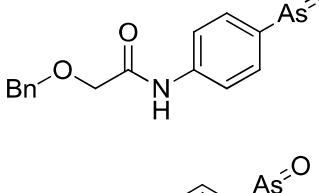
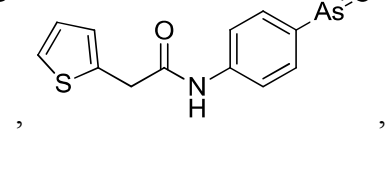
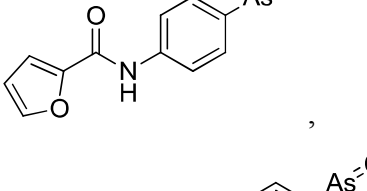
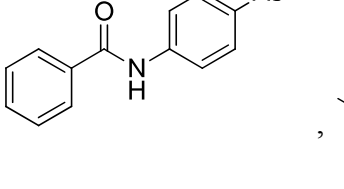
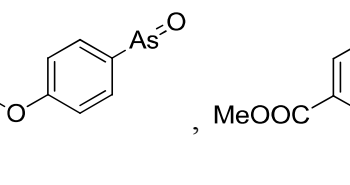
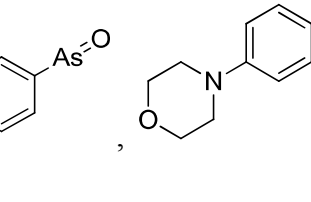
10. The ~~method~~use according to claim 7, wherein R_1 is each independently selected from H, deuterium, halogen, amino, C_{1-6} alkoxy, or C_{1-6} haloalkyl, wherein n is 1.

11. The ~~method~~use according to any one of claims 7 to 10, wherein R_1 is located at an ortho position and/or para position of the -As(O) group.

12. The ~~method~~use according to claim 11, wherein n is 0.

13. The ~~method~~use according to claim 6, wherein the small-molecule compound is

selected from the group consisting of the following compounds:

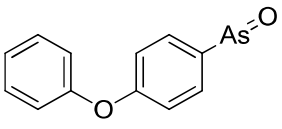
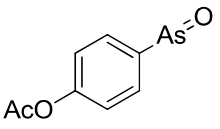
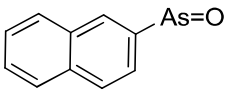
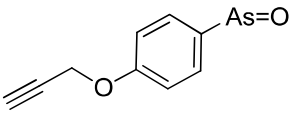
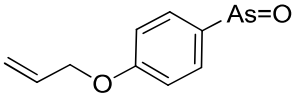
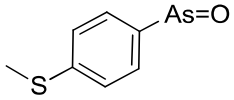
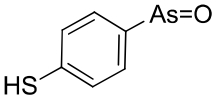
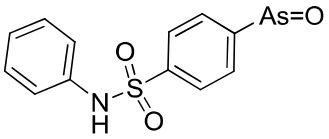
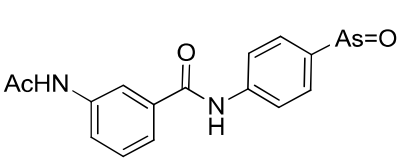
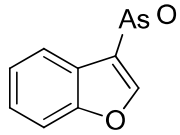
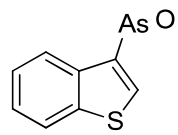
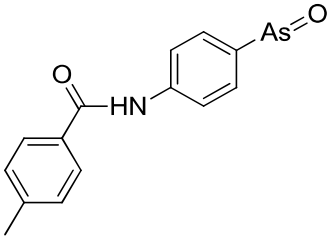
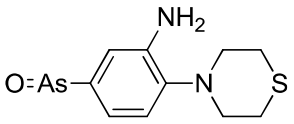
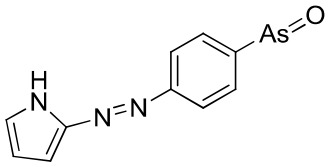
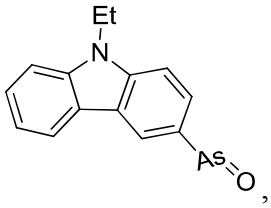
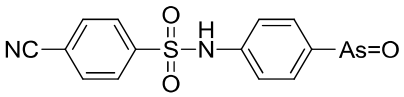
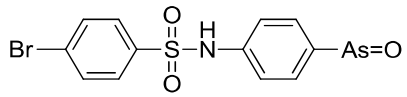
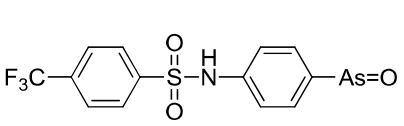
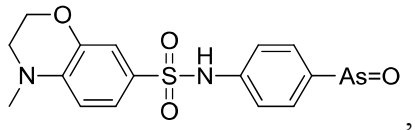
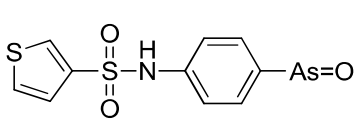
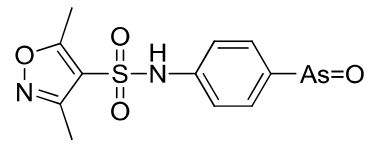
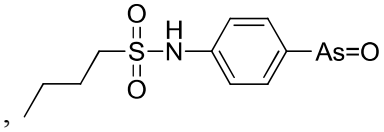
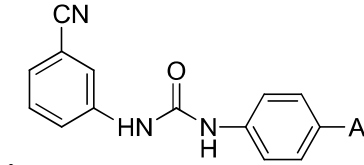
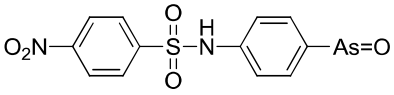
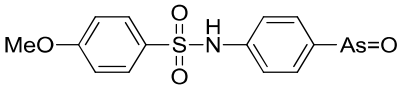

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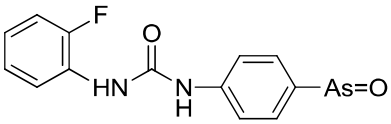
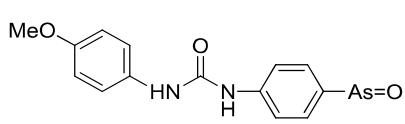
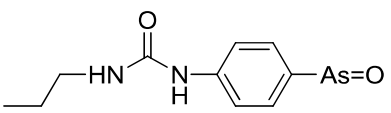
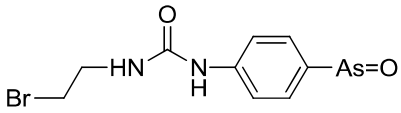
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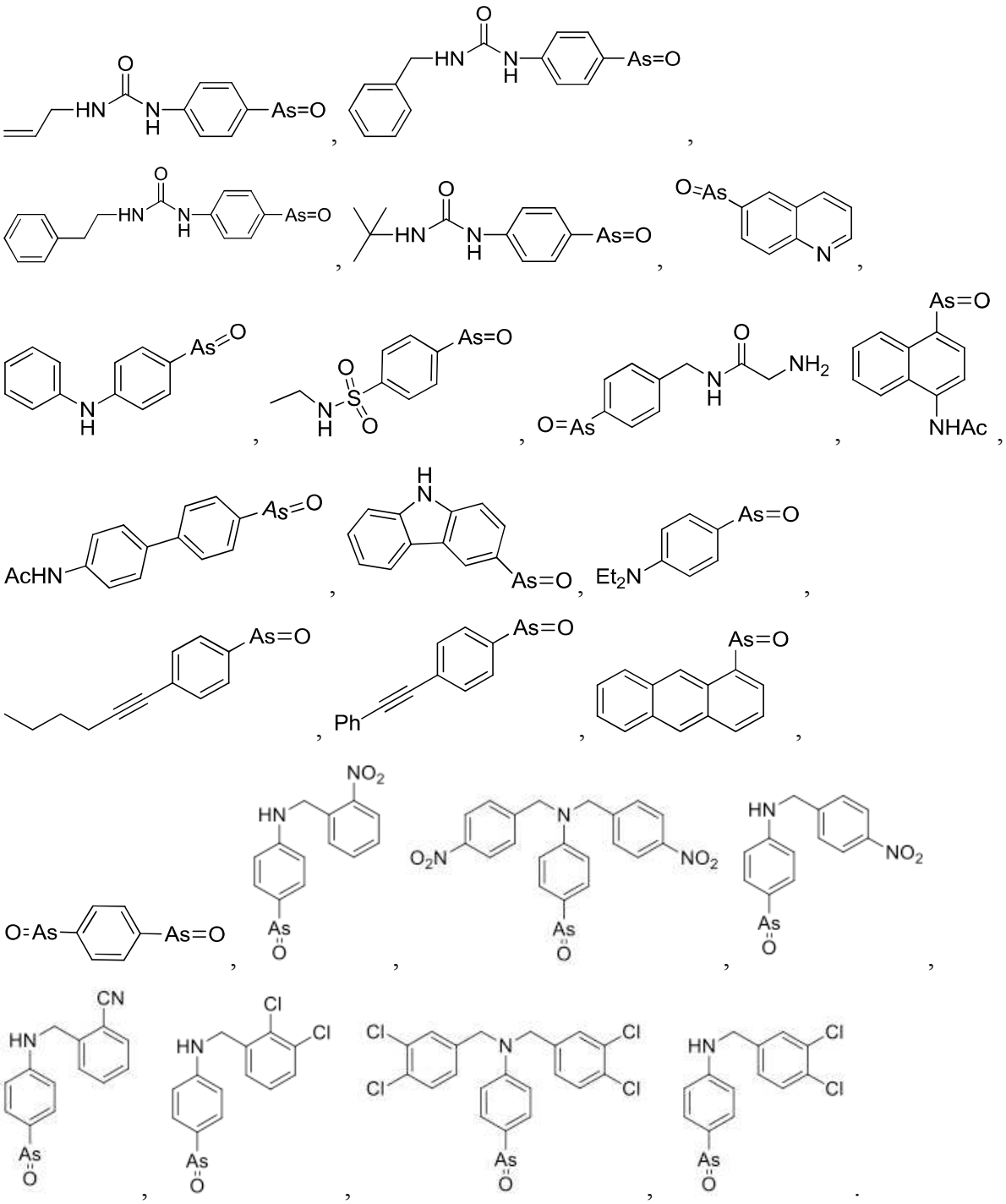
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14. The ~~method~~use according to claim 2, wherein the antibody is a monoclonal antibody or a polyclonal antibody.

15. The ~~method~~use according to claim 2 or 14, wherein the antibody is a chimeric antibody, a humanized antibody, or a fully human antibody.

16. The ~~method~~use according to claim 2, wherein the RNAi molecule is a small interfering RNA (siRNA), a short hairpin RNA (shRNA), or a microRNA (miRNA).

17. The ~~method~~use according to claim 2 or 16, wherein the RNAi molecule has a length of 18-100 bases.

18. The ~~method~~use according to any one of claims 2, and 16-17, wherein the RNAi molecule is modified to enhance its stability.

19. The ~~method~~use according to claim 1, wherein the subject is a human or a mammal.

~~20. The method according to claim 1, wherein the mood disorder is an elevated mood, a depressed mood, or a cycle of elevated and depressed moods.~~

~~21~~20. The ~~method~~use according to claim 1, wherein the mood disorder is anxiety~~,~~ or depression~~, schizophrenia, or mania~~.

~~22~~21. The ~~method~~use according to claim 1, wherein the mood disorder is caused by a neurodegenerative disease, stroke, or malignant tumor.

~~23~~22. The ~~method~~use according to claim 1, wherein the mood disorder is anxiety or depression caused by a neurodegenerative disease.

~~24~~23. The ~~method~~use according to claim 1, wherein the PI4KIIIα/FAM126/TTC7 complex inhibitor is to be administered orally, subcutaneously, intramuscularly, or intravenously.

~~25. The method according to claim 1, further comprising diagnosing the subject as having the mood disorder before administering an effective amount of PI4KIIIα/FAM126/TTC7 complex inhibitor to the subject.~~

~~26~~24. The ~~method~~use according to claim 1, ~~further comprising administering~~wherein a second reagent is to be administered to the subject in need thereof.

~~27~~25. The method according to claim ~~26~~24, wherein the second reagent is a reagent used for treating the mood disorder.

~~28~~26. The method according to claim ~~26~~24, wherein the second reagent is a reagent used for treating a neurodegenerative disease, stroke, or malignant tumor.

~~29~~27. The method according to claim ~~26~~24, wherein the PI4KIIIα/FAM126/TTC7 complex inhibitor is to be administered before, after, or simultaneously with the second reagent.

~~30. Use of a PI4KIIIα/FAM126/TTC7 complex inhibitor in manufacture of a medicament~~

~~for preventing or treating a mood disorder.~~

~~31. Use of a PI4KIIIα/FAM126/TTC7 complex inhibitor in preventing or treating a mood disorder, comprising administering an effective amount of PI4KIIIα/FAM126/TTC7 complex inhibitor to a subject in need thereof.~~