[CLAIMS]

[Claim 1]

Use of an effective amount of 4-[5-[(3S)-3-aminopyrrolidine-1-carbonyl]-2-[2-fluoro-4-(2-hydroxy-2-methyl-propyl)phenyl]phenyl]-2-fluoro-benzonitrile or a salt thereof in the manufacture of a pharmaceutical composition for treating an LSD1-related disease or disorder in a patient in need, wherein

the LSD1-related disease or disorder is a head and neck cancer, esophagus cancer, gastric cancer, colon cancer, rectum cancer, liver cancer, gallbladder cancer, cholangiocarcinoma, biliary tract cancer, pancreatic cancer, lung cancer, breast cancer, ovarian cancer, cervical cancer, endometrial cancer, renal cancer, bladder cancer, prostate cancer, testicular tumor, osteosarcoma, soft-tissue sarcoma, leukemia, myelodysplastic syndrome, chronic myeloproliferative disease, malignant lymphoma, multiple myeloma, skin cancer, brain tumor, or mesothelioma, and

the pharmaceutical composition is to be administered to the patient on an administration schedule comprising daily dosing for one week, followed by a resting period of one week.

[Claim 2]

The use of Claim 1, wherein the administration schedule is based on a 2-week cycle, and the cycle is performed once or repeated two or more times.

[Claim 3]

The use of Claim 1, wherein 4-[5-[(3S)-3-aminopyrrolidine-1-carbonyl]-2-[2-fluoro-4-(2-hydroxy-2-methyl-propyl)phenyl]phenyl]-2-fluoro-benzonitrile or a salt thereof is to be administered once per day for one week.

[Claim 4]

The use of Claim 1, wherein 4-[5-[(3S)-3-aminopyrrolidine-1-carbonyl]-2-[2-fluoro-4-(2-hydroxy-2-methyl-propyl)phenyl]phenyl]-2-fluoro-benzonitrile or a salt thereof is to be administered orally.

[Claim 5]

Use of an effective amount of 4-[5-[(3S)-3-aminopyrrolidine-1-carbonyl]-2-[2-fluoro-4-(2-hydroxy-2-methyl-propyl)phenyl]phenyl]-2-fluoro-benzonitrile or a salt thereof in the manufacture of a pharmaceutical composition for treating an LSD1-related disease in a patient in need, wherein

the LSD1-related disease or disorder is a head and neck cancer, esophagus cancer, gastric cancer, colon cancer, rectum cancer, liver cancer, gallbladder cancer, cholangiocarcinoma, biliary tract cancer, pancreatic cancer, lung cancer, breast cancer, ovarian cancer, cervical cancer, endometrial cancer, renal cancer, bladder cancer, prostate cancer, testicular tumor, osteosarcoma, soft-tissue sarcoma, leukemia, myelodysplastic syndrome, chronic myeloproliferative disease, malignant lymphoma, multiple myeloma, skin cancer, brain tumor, or mesothelioma, and

the pharmaceutical composition is to be administered to the patient on an administration schedule of daily dosing for two weeks followed by a resting period for one week.

[Claim 6]

The use of Claim 5, wherein the administration schedule is based on a 3-week cycle, and the cycle is performed once or repeated two or more times.

[Claim 7]

The use of Claim 5, wherein 4-[5-[(3S)-3-aminopyrrolidine-1-carbonyl]-2-[2-fluoro-4-(2-hydroxy-2-methyl-propyl)phenyl]phenyl]-2-fluoro-benzonitrile or a salt thereof is to be administered once per day for two weeks.

[Claim 8]

The use of Claim 5, wherein 4-[5-[(3S)-3-aminopyrrolidine-1-carbonyl]-2-[2-fluoro-4-(2-hydroxy-2-methyl-propyl)phenyl]phenyl]-2-fluoro-benzonitrile or a salt thereof is to be administered orally.

[Claim 9]

Use of an effective amount of 4-[5-[(3S)-3-aminopyrrolidine-1-carbonyl]-2-[2-fluoro-

4-(2-hydroxy-2-methyl-propyl)phenyl]phenyl]-2-fluoro-benzonitrile or a salt thereof in the manufacture of a pharmaceutical composition for treating acute myeloid leukemia (AML) in a patient in need, wherein the pharmaceutical composition is to be administered to the patient as a single agent once daily for one week, followed by a resting period of one week during a 28-day cycle.

[Claim 10]

Use of an effective amount of 4-[5-[(3S)-3-aminopyrrolidine-1-carbonyl]-2-[2-fluoro-4-(2-hydroxy-2-methyl-propyl)phenyl]phenyl]-2-fluoro-benzonitrile or a salt thereof in the manufacture of a pharmaceutical composition for treating acute myeloid leukemia (AML) in a patient in need, wherein the pharmaceutical composition is to be administered to the patient as a single agent once daily for two weeks, followed by a resting period of one week during a 21-day cycle.

[Claim 11]

Use of an effective amount of 4-[5-[(3S)-3-aminopyrrolidine-1-carbonyl]-2-[2-fluoro-4-(2-hydroxy-2-methyl-propyl)phenyl]phenyl]-2-fluoro-benzonitrile or a salt thereof in the manufacture of a pharmaceutical composition for treating acute myeloid leukemia (AML) in a patient in need, wherein the pharmaceutical composition is to be administered to the patient on for one week, followed by a resting period of one week during a 28-day cycle, in combination with all-trans retinoic acid (ATRA) twice daily.

[Claim 12]

Use of an effective amount of 4-[5-[(3S)-3-aminopyrrolidine-1-carbonyl]-2-[2-fluoro-4-(2-hydroxy-2-methyl-propyl)phenyl]phenyl]-2-fluoro-benzonitrile or a salt thereof in the manufacture of a pharmaceutical composition for treating acute myeloid leukemia (AML) in a patient in need, wherein the pharmaceutical composition is to be administered to the patient for two weeks, followed by a resting period of one week during a 21-day cycle , in combination with all-trans retinoic acid (ATRA) twice daily.

[Claim 13]

Use of an effective amount of 4-[5-[(3S)-3-aminopyrrolidine-1-carbonyl]-2-[2-fluoro-

4-(2-hydroxy-2-methyl-propyl)phenyl]phenyl]-2-fluoro-benzonitrile or a salt thereof in the manufacture of a pharmaceutical composition for reducing the risk of recurrence of acute myeloid leukemia (AML) or death for a patient diagnosed with AML, wherein the pharmaceutical composition is to be administered to the patient on an administration schedule comprising daily dosing for one week, followed by a resting period of one week.

[Claim 14]

Use of an effective amount of 4-[5-[(3S)-3-aminopyrrolidine-1-carbonyl]-2-[2-fluoro-4-(2-hydroxy-2-methyl-propyl)phenyl]phenyl]-2-fluoro-benzonitrile or a salt thereof in the manufacture of a pharmaceutical composition for reducing the risk of recurrence of acute myeloid leukemia (AML) or death for a patient diagnosed with AML, wherein the pharmaceutical composition is to be administered to the patient on an administration schedule comprising daily dosing for two weeks, followed by a resting period of one week.

[Claim 15]

Use of an effective amount of 4-[5-[(3S)-3-aminopyrrolidine-1-carbonyl]-2-[2-fluoro-4-(2-hydroxy-2-methyl-propyl)phenyl]phenyl]-2-fluoro-benzonitrile or a salt thereof in the manufacture of a pharmaceutical composition for reducing the risk of recurrence of acute myeloid leukemia (AML) or death for a patient diagnosed with AML, wherein the pharmaceutical composition is to be administered to the patient on an administration schedule comprising daily dosing for one week, followed by a resting period of one week, in combination with all-trans retinoic acid (ATRA) twice daily.

[Claim 16]

Use of an effective amount of 4-[5-[(3S)-3-aminopyrrolidine-1-carbonyl]-2-[2-fluoro-4-(2-hydroxy-2-methyl-propyl)phenyl]phenyl]-2-fluoro-benzonitrile or a salt thereof in the manufacture of a pharmaceutical composition for reducing the risk of recurrence of acute myeloid leukemia (AML) or death for a patient diagnosed with AML, wherein the pharmaceutical composition is to be administered to the patient on an administration schedule comprising daily dosing for two weeks, followed by a resting period of one week, in combination with all-trans retinoic acid (ATRA) twice daily.

[Claim 17]

The use of any one of claims 13-16, wherein the risk of recurrence of AML or death is reduced by at least about 5%, at least about 10%, at least about 15%, at least about 20%, or at least about 25%.

[Claim 18]

Use of a compound comprising 4-[5-[(3S)-3-aminopyrrolidine-1-carbonyl]-2-[2-fluoro-4-(2-hydroxy-2-methyl-propyl)phenyl]phenyl]-2-fluoro-benzonitrile or a salt thereof in the manufacture of a medicament for treating acute myeloid leukemia (AML), wherein the medicament is to be administered on an administration schedule comprising daily dosing for one week, followed by a resting period of one week.

[Claim 19]

Use of a compound comprising 4-[5-[(3S)-3-aminopyrrolidine-1-carbonyl]-2-[2-fluoro-4-(2-hydroxy-2-methyl-propyl)phenyl]phenyl]-2-fluoro-benzonitrile or a salt thereof in the manufacture of a medicament for treating acute myeloid leukemia (AML), wherein the medicament is to be administered on an administration schedule comprising daily dosing for two weeks, followed by a resting period of one week.

[Claim 20]

Use of a compound comprising 4-[5-[(3S)-3-aminopyrrolidine-1-carbonyl]-2-[2-fluoro-4-(2-hydroxy-2-methyl-propyl)phenyl]phenyl]-2-fluoro-benzonitrile or a salt thereof in the manufacture of a medicament for treating acute myeloid leukemia (AML), wherein the medicament is to be administered on an administration schedule comprising daily dosing for one week, followed by a resting period of one week, in combination with all-trans retinoic acid (ATRA) twice daily.

[Claim 21]

Use of a compound comprising 4-[5-[(3S)-3-aminopyrrolidine-1-carbonyl]-2-[2-fluoro-4-(2-hydroxy-2-methyl-propyl)phenyl]phenyl]-2-fluoro-benzonitrile or a salt thereof in the manufacture of a medicament for treating acute myeloid leukemia (AML), wherein the medicament is to be administered on an administration schedule comprising daily dosing for

two weeks, followed by a resting period of one week, in combination with all-trans retinoic acid (ATRA) twice daily.

[Claim 22]

The use of any one of claims 11, 12, 15 and 16, wherein the pharmaceutical composition is to be administered in combination with all-trans retinoic acid (ATRA) continuously, sporadically or intermittently.