

Y is chosen from hydrogen, halogen, optionally substituted alkyl, optionally substituted cycloalkyl, or optionally substituted cycloalkylalkyl; and

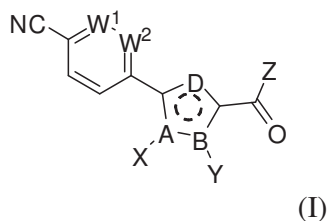
Z is chosen from an optionally substituted *N*-heterocyclyl, optionally substituted -N(H)-heterocyclylalkyl, optionally substituted -N(Me)-heterocyclylalkyl, or -N(R<sup>3</sup>)<sub>2</sub>.

**[0005]** One embodiment provides a pharmaceutical composition comprising a compound of Formula (I), or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable excipient.

**[0006]** One embodiment provides a method of regulating gene transcription in a cell comprising inhibiting lysine-specific demethylase 1 activity by exposing the lysine-specific demethylase 1 enzyme to a compound of Formula (I).

**[0007]** One embodiment provides a method of treating cancer in a patient in need thereof, comprising administering to the patient a compound of Formula (I), or a pharmaceutically acceptable salt thereof.

**[0007a]** One embodiment provides a compound having the structure of Formula (I), or a pharmaceutically acceptable salt thereof,



wherein,

A is C; B is N; and D is CH; or A is N; B is C; and D is N;

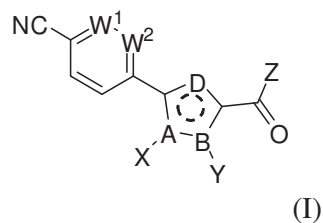
W<sup>1</sup> and W<sup>2</sup> are independently chosen from N, C-H, or C-F;

X is chosen from optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted cycloalkylalkyl, optionally substituted heterocyclalkyl, optionally substituted aralkyl, or optionally substituted heteroarylalkyl;

Y is chosen from hydrogen, halogen, optionally substituted alkyl, optionally substituted cycloalkyl, or optionally substituted cycloalkylalkyl; and

Z is chosen from an optionally substituted *N*-heterocyclyl, optionally substituted -N(H)-heterocyclalkyl, optionally substituted -N(Me)-heterocyclalkyl, or -N(R<sup>3</sup>)<sub>2</sub>, wherein each R<sup>3</sup> is independently chosen from hydrogen or optionally substituted alkyl.

**[0007b]** One embodiment provides a pharmaceutical composition comprising a compound of Formula (I), or a pharmaceutically acceptable salt thereof,



wherein,

A is C; B is N; and D is CH; or A is N; B is C; and D is N;

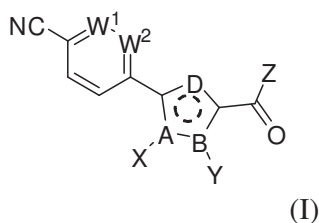
W<sup>1</sup> and W<sup>2</sup> are independently chosen from N, C-H, or C-F;

X is chosen from optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted cycloalkylalkyl, optionally substituted heterocyclalkyl, optionally substituted aralkyl, or optionally substituted heteroarylalkyl;

Y is chosen from hydrogen, halogen, optionally substituted alkyl, optionally substituted cycloalkyl, or optionally substituted cycloalkylalkyl; and

Z is chosen from an optionally substituted *N*-heterocyclyl, optionally substituted -N(H)-heterocyclalkyl, optionally substituted -N(Me)-heterocyclalkyl, or -N(R<sup>3</sup>)<sub>2</sub>, wherein each R<sup>3</sup> is independently chosen from hydrogen or optionally substituted alkyl, and a pharmaceutically acceptable excipient.

**[0007c]** One embodiment provides a use of a compound of Formula (I)



wherein,

A is C; B is N; and D is CH; or A is N; B is C; and D is N;

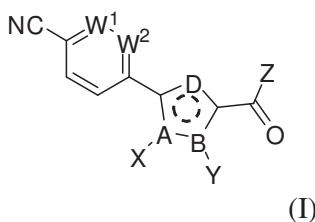
W<sup>1</sup> and W<sup>2</sup> are independently chosen from N, C-H, or C-F;

X is chosen from optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted cycloalkylalkyl, optionally substituted heterocyclalkyl, optionally substituted aralkyl, or optionally substituted heteroarylalkyl;

Y is chosen from hydrogen, halogen, optionally substituted alkyl, optionally substituted cycloalkyl, or optionally substituted cycloalkylalkyl; and

Z is chosen from an optionally substituted *N*-heterocyclyl, optionally substituted -N(H)-heterocyclalkyl, optionally substituted -N(Me)-heterocyclalkyl, or -N(R<sup>3</sup>)<sub>2</sub>, wherein each R<sup>3</sup> is independently chosen from hydrogen or optionally substituted alkyl, in the manufacture of a medicament for regulating gene transcription in a cell comprising inhibiting lysine-specific demethylase 1 activity.

**[0007d]** One embodiment provides a use of a compound of Formula (I), or a pharmaceutically acceptable salt thereof,



wherein,

A is C; B is N; and D is CH; or A is N; B is C; and D is N;

W<sup>1</sup> and W<sup>2</sup> are independently chosen from N, C-H, or C-F;

X is chosen from optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted cycloalkylalkyl, optionally substituted heterocyclalkyl, optionally substituted aralkyl, or optionally substituted heteroarylalkyl;

Y is chosen from hydrogen, halogen, optionally substituted alkyl, optionally substituted cycloalkyl, or optionally substituted cycloalkylalkyl; and

Z is chosen from an optionally substituted *N*-heterocyclyl, optionally substituted -N(H)-heterocyclalkyl, optionally substituted -N(Me)-heterocyclalkyl, or -N(R<sup>3</sup>)<sub>2</sub>, wherein each R<sup>3</sup> is independently chosen from hydrogen or optionally substituted alkyl,

in the manufacture of a medicament for treating acute myeloid leukemia, breast or prostate cancer in a patient in need thereof.

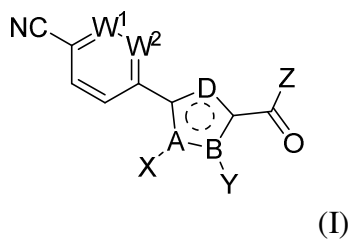
#### INCORPORATION BY REFERENCE

**[0008]** All publications, patents, and patent applications mentioned in this specification are herein incorporated by reference to the same extent as if each individual publication, patent, or patent application was specifically and individually indicated to be incorporated by reference.

## CLAIMS

We Claim:

1. A compound having the structure of Formula (I), or a pharmaceutically acceptable salt thereof,



wherein,

A is C; B is N; and D is CH; or A is N; B is C; and D is N;

$W^1$  and  $W^2$  are independently chosen from N, C-H, or C-F;

X is chosen from optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted cycloalkylalkyl, optionally substituted heterocyclylalkyl, optionally substituted aralkyl, or optionally substituted heteroarylalkyl;

Y is chosen from hydrogen, halogen, optionally substituted alkyl, optionally substituted cycloalkyl, or optionally substituted cycloalkylalkyl; and

Z is chosen from an optionally substituted *N*-heterocyclyl, optionally substituted -N(H)-heterocyclylalkyl, optionally substituted -N(Me)-heterocyclylalkyl, or -N(R<sup>3</sup>)<sub>2</sub>, wherein each R<sup>3</sup> is independently chosen from hydrogen or optionally substituted alkyl.

2. The compound or pharmaceutically acceptable salt of claim 1, wherein  $W^2$  is C-H.
3. The compound or pharmaceutically acceptable salt of claim 1 or 2, wherein  $W^1$  is C-F.
4. The compound or pharmaceutically acceptable salt of claim 1 or 2, wherein  $W^1$  is C-H.

5. The compound or pharmaceutically acceptable salt of claim 1 or 2, wherein  $W^1$  is N.
6. The compound or pharmaceutically acceptable salt of any one of claims 1-5, wherein X is optionally substituted aryl.
7. The compound or pharmaceutically acceptable salt of claim 6, wherein the optionally substituted aryl is an optionally substituted phenyl.
8. The compound or pharmaceutically acceptable salt of any one of claims 1-5, wherein X is optionally substituted heteroaryl.
9. The compound or pharmaceutically acceptable salt of claim 8, wherein the optionally substituted heteroaryl is chosen from an optionally substituted pyridinyl, optionally substituted pyrimidinyl, optionally substituted pyrazinyl, optionally substituted pyrazolyl, optionally substituted indazolyl, optionally substituted azaindazolyl, optionally substituted isoindazolyl, optionally substituted indolyl, or optionally substituted azaindolyl.
10. The compound or pharmaceutically acceptable salt of any one of claims 1-9, wherein Z is an optionally substituted *N*-heterocyclyl and the optionally substituted *N*-heterocyclyl is a 4-, 5-, 6-, or 7-membered *N*-heterocyclyl.
11. The compound or pharmaceutically acceptable salt of claim 10, wherein the optionally substituted *N*-heterocyclyl is a 6-membered *N*-heterocyclyl.
12. The compound or pharmaceutically acceptable salt of claim 11, wherein the optionally substituted *N*-heterocyclyl is an optionally substituted piperidine.
13. The compound or pharmaceutically acceptable salt of claim 12, wherein the optionally substituted piperidine is an optionally substituted 3-aminopiperidine.
14. The compound or pharmaceutically acceptable salt of claim 10, wherein the optionally substituted *N*-heterocyclyl is a 5-membered *N*-heterocyclyl.

15. The compound or pharmaceutically acceptable salt of claim 14, wherein the optionally substituted *N*-heterocyclyl is an optionally substituted pyrrolidine.
16. The compound or pharmaceutically acceptable salt of claim 15, wherein the optionally substituted pyrrolidine is an optionally substituted 3-aminopyrrolidine.
17. The compound or pharmaceutically acceptable salt of any one of claims 1-16, wherein Y is hydrogen.
18. The compound or pharmaceutically acceptable salt of any one of claims 1-16, wherein Y is halogen.
19. The compound or pharmaceutically acceptable salt of any one of claims 1-16, wherein Y is optionally substituted alkyl.
20. The compound or pharmaceutically acceptable salt of any one of claims 1-16, wherein Y is optionally substituted cycloalkyl.
21. The compound or pharmaceutically acceptable salt of any one of claims 1-16, wherein Y is optionally substituted cycloalkylalkyl.
22. The compound or pharmaceutically acceptable salt of claim 19, wherein the optionally substituted alkyl is an optionally substituted C<sub>1</sub>-C<sub>3</sub> alkyl.
23. The compound or pharmaceutically acceptable salt of claim 19, wherein the optionally substituted alkyl is an optionally substituted C<sub>1</sub> alkyl.
24. The compound or pharmaceutically acceptable salt of claim 19, wherein the optionally substituted alkyl is a methyl group.
25. The compound or pharmaceutically acceptable salt of any one of claims 1-24, wherein A is N; B is C; and D is N.
26. The compound or pharmaceutically acceptable salt of any one of claims 1-24, wherein A is C; B is N; and D is CH.

27. The compound or pharmaceutically acceptable salt of claim 26, wherein R<sup>3</sup> is hydrogen.
28. The compound or pharmaceutically acceptable salt of claim 26, wherein R<sup>3</sup> is optionally substituted alkyl.
29. The compound or pharmaceutically acceptable salt of claim 1, wherein the compound is any one of the following:

4-[5-(3-(R)-amino-piperidine-1-carbonyl)-1-methyl-2-p-tolyl-1H-pyrrol-3-yl]-benzonitrile;

4-[5-(3-(R)-amino-piperidine-1-carbonyl)-2-(4-methoxy-phenyl)-1-methyl-1H-pyrrol-3-yl]-2-fluoro-benzonitrile;

4-[5-(3-(R)-amino-piperidine-1-carbonyl)-1-(2-hydroxy-ethyl)-2-p-tolyl-1H-pyrrol-3-yl]-benzonitrile;

4-[5-(3-(R)-amino-piperidine-1-carbonyl)-1-(2-hydroxy-ethyl)-2-p-tolyl-1H-pyrrol-3-yl]-2-fluoro-benzonitrile;

4-[5-(3-(R)-amino-piperidine-1-carbonyl)-1-methyl-2-(6-methyl-pyridin-3-yl)-1H-pyrrol-3-yl]-benzonitrile;

4-[5-(3-(R)-amino-piperidine-1-carbonyl)-1-methyl-2-pyridin-4-yl-1H-pyrrol-3-yl]-benzonitrile;

4-[5-(3-(R)-amino-piperidine-1-carbonyl)-1-(2-hydroxy-ethyl)-2-(4-methoxy-phenyl)-1H-pyrrol-3-yl]-benzonitrile;

4-[5-(3-(R)-amino-piperidine-1-carbonyl)-1-(2-hydroxy-ethyl)-2-(4-methoxy-phenyl)-1H-pyrrol-3-yl]-2-fluoro-benzonitrile;

4-[5-(3-(R)-amino-piperidine-1-carbonyl)-1-(3-hydroxy-propyl)-2-(4-methoxy-phenyl)-1H-pyrrol-3-yl]-2-fluoro-benzonitrile;

4-[5-(3-(R)-amino-piperidine-1-carbonyl)-1-methyl-2-(1-methyl-1H-benzoimidazol-5-yl)-1H-pyrrol-3-yl]-2-fluoro-benzonitrile;

4-[4-[(3R)-3-aminopiperidine-1-carbonyl]-5-methyl-1-(4-methylphenyl)imidazol-2-yl]benzonitrile;

4-[4-[(3R)-3-aminopiperidine-1-carbonyl]-1-(4-methoxyphenyl)-5-methylimidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3R)-3-aminopyrrolidine-1-carbonyl]-1-(4-methoxyphenyl)-5-methylimidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3S)-3-aminopyrrolidine-1-carbonyl]-1-(4-methoxyphenyl)-5-methylimidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3R)-3-aminopiperidine-1-carbonyl]-1-(6-methoxypyridin-3-yl)-5-methylimidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3R)-3-aminopiperidine-1-carbonyl]-1-(3-fluoro-4-methoxyphenyl)-5-methylimidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3S)-3-aminopiperidine-1-carbonyl]-1-(3-fluoro-4-methoxyphenyl)-5-methylimidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3S)-3-aminopyrrolidine-1-carbonyl]-1-(3-fluoro-4-methoxyphenyl)-5-methylimidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3R)-3-aminopiperidine-1-carbonyl]-1-(3-fluoro-4-methoxyphenyl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3S)-3-aminopyrrolidine-1-carbonyl]-1-(3-fluoro-4-methoxyphenyl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3R)-3-aminopiperidine-1-carbonyl]-5-methyl-1-(2-methylindazol-5-yl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3S)-3-aminopyrrolidine-1-carbonyl]-5-methyl-1-(2-methylindazol-5-yl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3R)-3-aminopiperidine-1-carbonyl]-5-methyl-1-(1-methylindazol-5-yl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3S)-3-aminopyrrolidine-1-carbonyl]-5-methyl-1-(1-methylindazol-5-yl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3R)-3-aminopiperidine-1-carbonyl]-1-(2-methylindazol-5-yl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3S)-3-aminopyrrolidine-1-carbonyl]-1-(2-methylindazol-5-yl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3R)-3-aminopiperidine-1-carbonyl]-1-(1-methylindazol-5-yl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3S)-3-aminopyrrolidine-1-carbonyl]-1-(1-methylindazol-5-yl)imidazol-2-yl]-2-fluorobenzonitrile;

4-{5-[[[(3R)-3-aminopiperidyl]carbonyl]-1-methyl-2-(2-methyl(2H-indazol-5-yl))pyrrol-3-yl]}-2-fluorobenzenecarbonitrile;

N-((3R)pyrrolidin-3-yl)[4-(4-cyano-3-fluorophenyl)-1-methyl-5-(2-methyl(2H-indazol-5-yl))pyrrol-2-yl]carboxamide;

N-(2-aminoethyl)[4-(4-cyano-3-fluorophenyl)-1-methyl-5-(2-methyl(2H-indazol-5-yl))pyrrol-2-yl]-N-methylcarboxamide;

[4-(4-cyano-3-fluorophenyl)-1-methyl-5-(2-methyl(2H-indazol-5-yl))pyrrol-2-yl]-N-[2-(methylamino)ethyl]carboxamide;

N-[[[(3S)pyrrolidin-3-yl)methyl][4-(4-cyano-3-fluorophenyl)-1-methyl-5-(2-methyl(2H-indazol-5-yl))pyrrol-2-yl]carboxamide;

(R)-4-(5-(3-aminopiperidine-1-carbonyl)-1-(3-hydroxypropyl)-2-(2-methyl-2H-indazol-5-yl)-1H-pyrrol-3-yl)-2-fluorobenzonitrile;

(R)-4-(5-(3-aminopiperidine-1-carbonyl)-1-(2-hydroxyethyl)-2-(2-methyl-2H-indazol-5-yl)-1H-pyrrol-3-yl)-2-fluorobenzonitrile;

(R)-4-(5-(3-aminopiperidine-1-carbonyl)-1-(2-methoxyethyl)-2-(2-methyl-2H-indazol-5-yl)-1H-pyrrol-3-yl)-2-fluorobenzonitrile;

(R)-2-(5-(3-aminopiperidine-1-carbonyl)-3-(4-cyano-3-fluorophenyl)-2-(4-methoxyphenyl)-1H-pyrrol-1-yl)acetamide;

4-(5-((R)-3-aminopiperidine-1-carbonyl)-1-((R)-2,3-dihydroxypropyl)-2-(2-methyl-2H-indazol-5-yl)-1H-pyrrol-3-yl)-2-fluorobenzonitrile;

4-(5-((R)-3-aminopiperidine-1-carbonyl)-1-((S)-2,3-dihydroxypropyl)-2-(2-methyl-2H-indazol-5-yl)-1H-pyrrol-3-yl)-2-fluorobenzonitrile;

N-[[[(3R)pyrrolidin-3-yl)methyl][4-(4-cyano-3-fluorophenyl)-1-methyl-5-(2-methyl(2H-indazol-5-yl))pyrrol-2-yl]carboxamide;

4-{5-[[[(3R)-3-aminopiperidyl]carbonyl]-3-(4-cyano-3-fluorophenyl)-2-(4-methoxyphenyl)pyrrol-1-yl]}butanoic acid;

4-{5-[[[(3R)-3-aminopiperidyl]carbonyl]-3-(4-cyano-3-fluorophenyl)-2-(4-methoxyphenyl)pyrrolyl]butanamide;

4-[4-(4-Aminopiperidine-1-carbonyl)-5-methyl-1-(2-methylindazol-5-yl)imidazol-2-yl]-2-fluorobenzonitrile;

N-(2-Aminoethyl)-2-(4-cyano-3-fluorophenyl)-N,5-dimethyl-1-(2-methylindazol-5-yl)imidazole-4-carboxamide;

2-(4-Cyano-3-fluorophenyl)-5-methyl-1-(2-methylindazol-5-yl)-N-piperidin-3-ylimidazole-4-carboxamide;

2-(4-Cyano-3-fluorophenyl)-5-methyl-1-(2-methylindazol-5-yl)-N-pyrrolidin-3-ylimidazole-4-carboxamide;

4-[4-[(3R)-3-Aminopiperidine-1-carbonyl]-1-(6-fluoro-2-methylindazol-5-yl)-5-methylimidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3S)-3-(Dimethylamino)pyrrolidine-1-carbonyl]-1-(6-fluoro-2-methylindazol-5-yl)-5-methylimidazol-2-yl]-2-fluorobenzonitrile;

2-Fluoro-4-[1-(6-fluoro-2-methylindazol-5-yl)-5-methyl-4-[(3S)-3-(methylamino)pyrrolidine-1-carbonyl]imidazol-2-yl]benzonitrile;

4-[4-[(3S)-3-Aminopyrrolidine-1-carbonyl]-1-(7-fluoro-2-methylindazol-5-yl)-5-methylimidazol-2-yl]-2-fluorobenzonitrile;

2-Fluoro-4-[1-(7-fluoro-2-methylindazol-5-yl)-5-methyl-4-[(3S)-3-(methylamino)pyrrolidine-1-carbonyl]imidazol-2-yl]benzonitrile;

4-[4-[(3S)-3-(Dimethylamino)pyrrolidine-1-carbonyl]-1-(7-fluoro-2-methylindazol-5-yl)-5-methylimidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3R)-3-Aminopiperidine-1-carbonyl]-1-(3-chloro-2-methylindazol-5-yl)-5-methylimidazol-2-yl]-2-fluorobenzonitrile;

4-[1-(3-Chloro-2-methylindazol-5-yl)-5-methyl-4-[(3S)-3-(methylamino)pyrrolidine-1-carbonyl]imidazol-2-yl]-2-fluorobenzonitrile;

4-[1-(3-Chloro-2-methylindazol-5-yl)-5-methyl-4-[(3R)-3-(methylamino)piperidine-1-carbonyl]imidazol-2-yl]-2-fluorobenzonitrile;

1-(3-Chloro-2-methylindazol-5-yl)-2-(4-cyano-3-fluorophenyl)-5-methyl-N-[(3R)-1-methylpiperidin-3-yl]imidazole-4-carboxamide;

4-[1-(3-Chloro-2-methylindazol-5-yl)-4-[(3S)-3-(dimethylamino)pyrrolidine-1-carbonyl]imidazol-2-yl]-2-fluorobenzonitrile;

4-[1-(3-Chloro-2-methylindazol-5-yl)-4-[(3S)-3-(dimethylamino)pyrrolidine-1-carbonyl]-5-fluoroimidazol-2-yl]-2-fluorobenzonitrile;

1-(3-Chloro-2-methylindazol-5-yl)-2-(4-cyano-3-fluorophenyl)-N-[(3R)-1-methylpiperidin-3-yl]imidazole-4-carboxamide;

2-(4-Cyano-3-fluorophenyl)-5-methyl-1-(2-methylindazol-5-yl)-N-[(3R)-1-methylpiperidin-3-yl]imidazole-4-carboxamide;

4-[4-[(3R)-3-Aminopiperidine-1-carbonyl]-1-(3-chloro-2-methylindazol-5-yl)-5-fluoroimidazol-2-yl]-2-fluorobenzonitrile;

2-(4-Cyano-3-fluorophenyl)-1-(3-fluoro-4-methoxyphenyl)-5-methyl-N-[(3R)-piperidin-3-yl]imidazole-4-carboxamide;

2-(4-Cyano-3-fluorophenyl)-1-(3-fluoro-4-methoxyphenyl)-5-methyl-N-[(3S)-piperidin-3-yl]imidazole-4-carboxamide;

2-Fluoro-4-[1-(3-fluoro-4-methoxyphenyl)-5-methyl-4-[(3S)-3-(methylamino)pyrrolidine-1-carbonyl]imidazol-2-yl]benzonitrile;

2-Fluoro-4-[1-(3-fluoro-4-methoxyphenyl)-4-[(3S)-3-(methylamino)pyrrolidine-1-carbonyl]imidazol-2-yl]benzonitrile;

4-[4-[(3R)-3-Aminopiperidine-1-carbonyl]-5-chloro-1-(3-fluoro-4-methoxyphenyl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3R)-3-Aminopiperidine-1-carbonyl]-5-fluoro-1-(3-fluoro-4-methoxyphenyl)imidazol-2-yl]-2-fluorobenzonitrile;

2-Fluoro-4-[5-fluoro-1-(3-fluoro-4-methoxyphenyl)-4-[(3S)-3-(methylamino)pyrrolidine-1-carbonyl]imidazol-2-yl]benzonitrile;

2-Fluoro-4-[1-(4-methoxyphenyl)-5-methyl-4-[(3S)-3-(methylamino)pyrrolidine-1-carbonyl]imidazol-2-yl]benzonitrile;

2-Fluoro-4-[1-(4-methoxyphenyl)-5-methyl-4-[(3R)-3-(methylamino)piperidine-1-carbonyl]imidazol-2-yl]benzonitrile;

2-Fluoro-4-[1-(4-methoxyphenyl)-4-[(3S)-3-(methylamino)pyrrolidine-1-carbonyl]imidazol-2-yl]benzonitrile;

2-Fluoro-4-[1-(4-methoxyphenyl)-4-[(3R)-3-(methylamino)piperidine-1-carbonyl]imidazol-2-yl]benzonitrile;

2-Fluoro-4-[5-fluoro-1-(4-methoxyphenyl)-4-[(3S)-3-(methylamino)pyrrolidine-1-carbonyl]imidazol-2-yl]benzonitrile;

2-Fluoro-4-[5-fluoro-1-(4-methoxyphenyl)-4-[(3R)-3-(methylamino)piperidine-1-carbonyl]imidazol-2-yl]benzonitrile;

4-[4-[(3R)-3-Aminopiperidine-1-carbonyl]-5-chloro-1-(2-methylindazol-5-yl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3R)-3-Aminopiperidine-1-carbonyl]-5-chloro-1-(3-chloro-2-methylindazol-5-yl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3R)-3-Aminopiperidine-1-carbonyl]-5-fluoro-1-(2-methylindazol-5-yl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3R)-3-Aminopiperidine-1-carbonyl]-1-(6-cyclopropylpyridin-3-yl)-5-methylimidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3S)-3-Aminopyrrolidine-1-carbonyl]-1-(6-cyclopropylpyridin-3-yl)-5-methylimidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3R)-3-Aminopiperidine-1-carbonyl]-5-chloro-1-(6-cyclopropylpyridin-3-yl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3S)-3-Aminopyrrolidine-1-carbonyl]-5-chloro-1-(6-cyclopropylpyridin-3-yl)imidazol-2-yl]-2-fluorobenzonitrile;

2-(4-Cyano-3-fluorophenyl)-1-(3-fluoro-4-methoxyphenyl)-5-methyl-N-[(3R)-pyrrolidin-3-yl]imidazole-4-carboxamide;

2-(4-Cyano-3-fluorophenyl)-1-(3-fluoro-4-methoxyphenyl)-5-methyl-N-[(3S)-pyrrolidin-3-yl]imidazole-4-carboxamide;

5-Chloro-2-(4-cyano-3-fluorophenyl)-1-(3-fluoro-4-methoxyphenyl)-N-[(3R)-piperidin-3-yl]imidazole-4-carboxamide;

5-Chloro-2-(4-cyano-3-fluorophenyl)-1-(3-fluoro-4-methoxyphenyl)-N-[(3S)-piperidin-3-yl]imidazole-4-carboxamide;

2-(4-Cyano-3-fluorophenyl)-5-fluoro-1-(3-fluoro-4-methoxyphenyl)-N-[(3R)-piperidin-3-yl]imidazole-4-carboxamide;

2-(4-Cyano-3-fluorophenyl)-1-(3-fluoro-4-methoxyphenyl)-5-methyl-N-piperidin-4-ylimidazole-4-carboxamide;

4-[4-[3-(Aminomethyl)azetidine-1-carbonyl]-1-(3-fluoro-4-methoxyphenyl)-5-methylimidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3S)-3-Aminopyrrolidine-1-carbonyl]-5-fluoro-1-(3-fluoro-4-methoxyphenyl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[4-(1,7-Diazaspiro[4.4]nonane-7-carbonyl)-5-methyl-1-(2-methylindazol-5-yl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[4-(2,6-Diazaspiro[3.4]octane-6-carbonyl)-5-methyl-1-(2-methylindazol-5-yl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[4-(1,7-Diazaspiro[3.4]octane-7-carbonyl)-5-methyl-1-(1-methylindazol-5-yl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[1-(3-Chloro-2-methylindazol-5-yl)-4-(1,7-diazaspiro[3.4]octane-7-carbonyl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3S)-3-(Dimethylamino)pyrrolidine-1-carbonyl]-5-methyl-1-(2-methylindazol-5-yl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3S)-3-(Dimethylamino)pyrrolidine-1-carbonyl]-5-methyl-1-(1-methylindazol-5-yl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[1-(3-Chloro-2-methylindazol-5-yl)-4-[(3S)-3-(dimethylamino)pyrrolidine-1-carbonyl]-5-methylimidazol-2-yl]-2-fluorobenzonitrile;

2-Fluoro-4-[5-methyl-4-[(3S)-3-(methylamino)piperidine-1-carbonyl]-1-(2-methylindazol-5-yl)imidazol-2-yl]benzonitrile;

2-Fluoro-4-[5-methyl-4-[(3R)-3-(methylamino)piperidine-1-carbonyl]-1-(2-methylindazol-5-yl)imidazol-2-yl]benzonitrile;

4-[4-[(3S)-3-(Dimethylamino)pyrrolidine-1-carbonyl]-1-(2-methylindazol-5-yl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[5-Chloro-4-[(3S)-3-(dimethylamino)pyrrolidine-1-carbonyl]-1-(2-methylindazol-5-yl)imidazol-2-yl]-2-fluorobenzonitrile;

4-[5-Chloro-1-(3-chloro-2-methylindazol-5-yl)-4-[(3S)-3-(dimethylamino)pyrrolidine-1-carbonyl]imidazol-2-yl]-2-fluorobenzonitrile;

4-[4-[(3S)-3-(Dimethylamino)pyrrolidine-1-carbonyl]-1-(2,3-dimethylindazol-5-yl)-5-methylimidazol-2-yl]-2-fluorobenzonitrile;

4-[1-(2,3-Dimethylindazol-5-yl)-5-methyl-4-[(3S)-3-(methylamino)pyrrolidine-1-carbonyl]imidazol-2-yl]-2-fluorobenzonitrile;

2-(4-Cyano-3-fluorophenyl)-1-(2,3-dimethylindazol-5-yl)-5-methyl-N-[(3R)-piperidin-3-yl]imidazole-4-carboxamide;

4-[1-(2,3-Dimethylindazol-5-yl)-5-methyl-4-[(3R)-3-(methylamino)piperidine-1-carbonyl]imidazol-2-yl]-2-fluorobenzonitrile;

1-(3-Chloro-2-methylindazol-5-yl)-2-(4-cyano-3-fluorophenyl)-N-[(3R)-1-methylpyrrolidin-3-yl]imidazole-4-carboxamide;

1-(3-Chloro-2-methylindazol-5-yl)-2-(4-cyano-3-fluorophenyl)-N-[(3S)-1-methylpyrrolidin-3-yl]imidazole-4-carboxamide;

2-(4-Cyano-3-fluorophenyl)-5-methyl-1-(2-methylindazol-5-yl)-N-[(3R)-1-methylpyrrolidin-3-yl]imidazole-4-carboxamide;

2-(4-Cyano-3-fluorophenyl)-5-methyl-1-(2-methylindazol-5-yl)-N-[(3S)-1-methylpyrrolidin-3-yl]imidazole-4-carboxamide;

4-[1-(3-Chloro-6-fluoro-2-methylindazol-5-yl)-4-[(3S)-3-(dimethylamino)pyrrolidine-1-carbonyl]-5-methylimidazol-2-yl]-2-fluorobenzonitrile;

4-[1-(3-Chloro-6-fluoro-2-methylindazol-5-yl)-5-methyl-4-[(3S)-3-(methylamino)pyrrolidine-1-carbonyl]imidazol-2-yl]-2-fluorobenzonitrile;

4-[1-(3-Chloro-6-fluoro-2-methylindazol-5-yl)-4-[(3S)-3-(dimethylamino)pyrrolidine-1-carbonyl]-5-methylimidazol-2-yl]-2-fluorobenzonitrile;

4-[1-(3-Chloro-2-methylindazol-5-yl)-4-[(3S)-3-(methylamino)pyrrolidine-1-carbonyl]imidazol-2-yl]-2-fluorobenzonitrile;

1-(3-Chloro-2-methylindazol-5-yl)-2-(4-cyano-3-fluorophenyl)-N-[(3R)-piperidin-3-yl]imidazole-4-carboxamide;

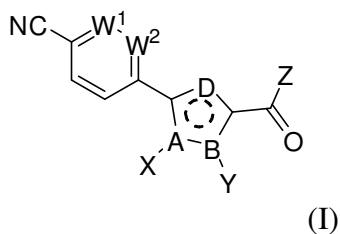
4-[1-(3-Chloro-2-methylindazol-5-yl)-4-[(3R)-3-(methylamino)piperidine-1-carbonyl]imidazol-2-yl]-2-fluorobenzonitrile;

4-[1-(3-Chloro-2-methylindazol-5-yl)-4-[(3S)-3-(methylamino)piperidine-1-carbonyl]imidazol-2-yl]-2-fluorobenzonitrile;

1-(3-Chloro-2-methylindazol-5-yl)-2-(4-cyano-3-fluorophenyl)-5-methyl-N-[(3R)-piperidin-3-yl]imidazole-4-carboxamide; or

4-[1-(3-Chloro-2-methylindazol-5-yl)-5-methyl-4-[(3S)-3-(methylamino)piperidine-1-carbonyl]imidazol-2-yl]-2-fluorobenzonitrile.

30. A pharmaceutical composition comprising a compound of Formula (I), or a pharmaceutically acceptable salt thereof,



wherein,

A is C; B is N; and D is CH; or A is N; B is C; and D is N;

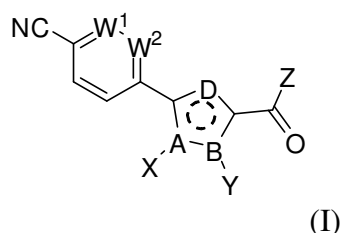
$W^1$  and  $W^2$  are independently chosen from N, C-H, or C-F;

X is chosen from optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted cycloalkylalkyl, optionally substituted heterocyclylalkyl, optionally substituted aralkyl, or optionally substituted heteroarylalkyl;

Y is chosen from hydrogen, halogen, optionally substituted alkyl, optionally substituted cycloalkyl, or optionally substituted cycloalkylalkyl; and

Z is chosen from an optionally substituted *N*-heterocyclyl, optionally substituted -N(H)-heterocyclylalkyl, optionally substituted -N(Me)-heterocyclylalkyl, or -N(R<sup>3</sup>)<sub>2</sub>, wherein each R<sup>3</sup> is independently chosen from hydrogen or optionally substituted alkyl, and a pharmaceutically acceptable excipient.

31. Use of a compound of Formula (I)



wherein,

A is C; B is N; and D is CH; or A is N; B is C; and D is N;

W<sup>1</sup> and W<sup>2</sup> are independently chosen from N, C-H, or C-F;

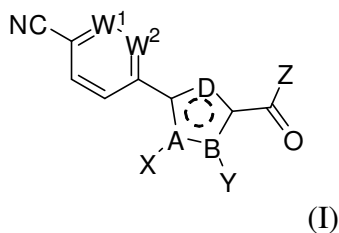
X is chosen from optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted cycloalkylalkyl, optionally substituted heterocyclalkyl, optionally substituted aralkyl, or optionally substituted heteroarylalkyl;

Y is chosen from hydrogen, halogen, optionally substituted alkyl, optionally substituted cycloalkyl, or optionally substituted cycloalkylalkyl; and

Z is chosen from an optionally substituted *N*-heterocyclyl, optionally substituted -N(H)-heterocyclalkyl, optionally substituted -N(Me)-heterocyclalkyl, or -N(R<sup>3</sup>)<sub>2</sub>, wherein each R<sup>3</sup> is independently chosen from hydrogen or optionally substituted alkyl,

in the manufacture of a medicament for regulating gene transcription in a cell comprising inhibiting lysine-specific demethylase 1 activity.

32. Use of a compound of Formula (I), or a pharmaceutically acceptable salt thereof,



wherein,

A is C; B is N; and D is CH; or A is N; B is C; and D is N;

$W^1$  and  $W^2$  are independently chosen from N, C-H, or C-F;

X is chosen from optionally substituted aryl, optionally substituted heteroaryl, optionally substituted cycloalkyl, optionally substituted heterocyclyl, optionally substituted cycloalkylalkyl, optionally substituted heterocyclalkyl, optionally substituted aralkyl, or optionally substituted heteroarylalkyl;

Y is chosen from hydrogen, halogen, optionally substituted alkyl, optionally substituted cycloalkyl, or optionally substituted cycloalkylalkyl; and

Z is chosen from an optionally substituted *N*-heterocyclyl, optionally substituted -N(H)-heterocyclalkyl, optionally substituted -N(Me)-heterocyclalkyl, or -N(R<sup>3</sup>)<sub>2</sub>; wherein each R<sup>3</sup> is independently chosen from hydrogen or optionally substituted alkyl,

in the manufacture of a medicament for treating acute myeloid leukemia, breast or prostate cancer in a patient in need thereof.