FIG. 1A

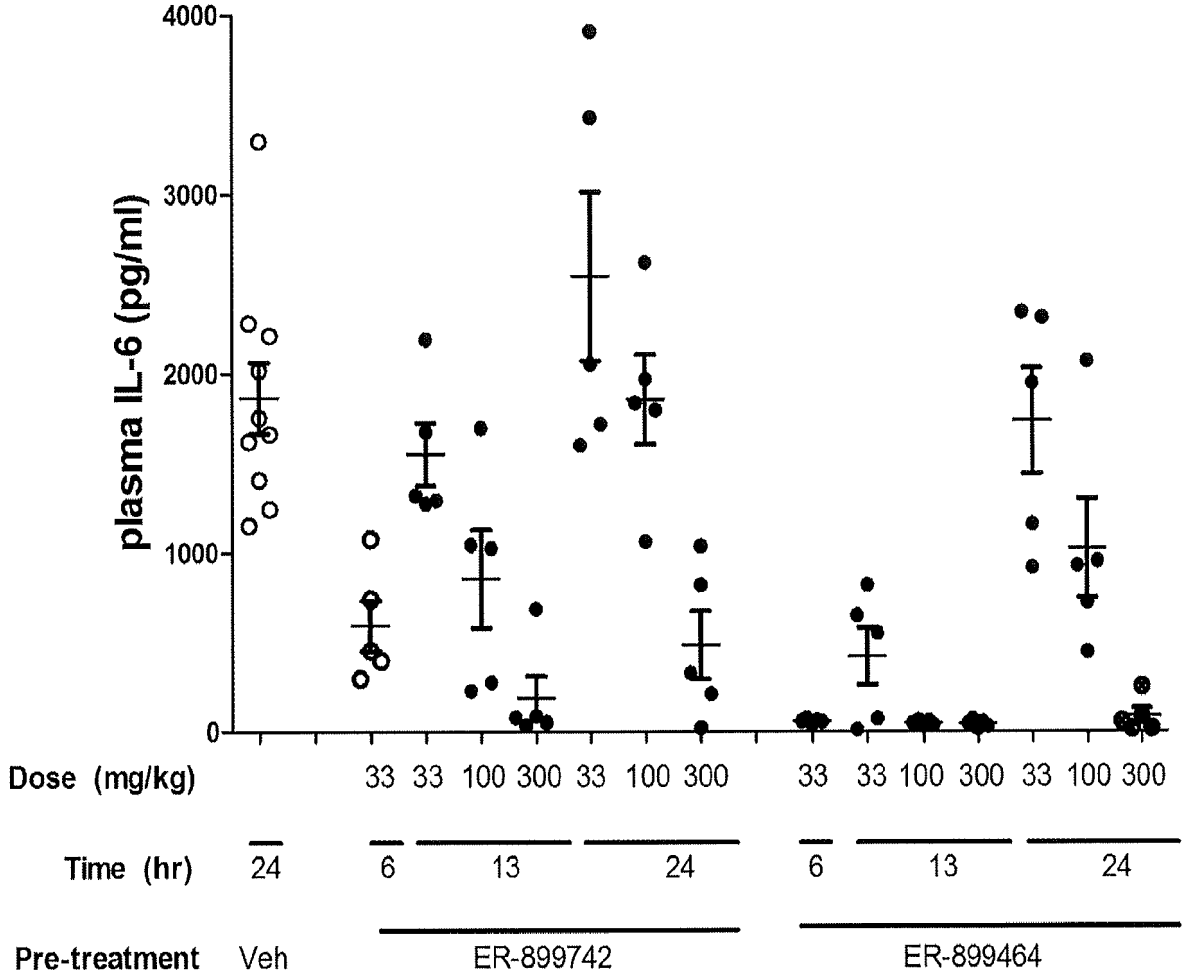

plasma IL-6 (pg/ml)
4000
3000
2000
1000
0
Dose (mg/kg)
33 33 100 300 33 100 300 33 33 100 300 33 100 300
Time (hr)
24 6 13 24 6 13 24
Pre-treatment
Veh
ER-899742
ER-899464

FIG. 1B

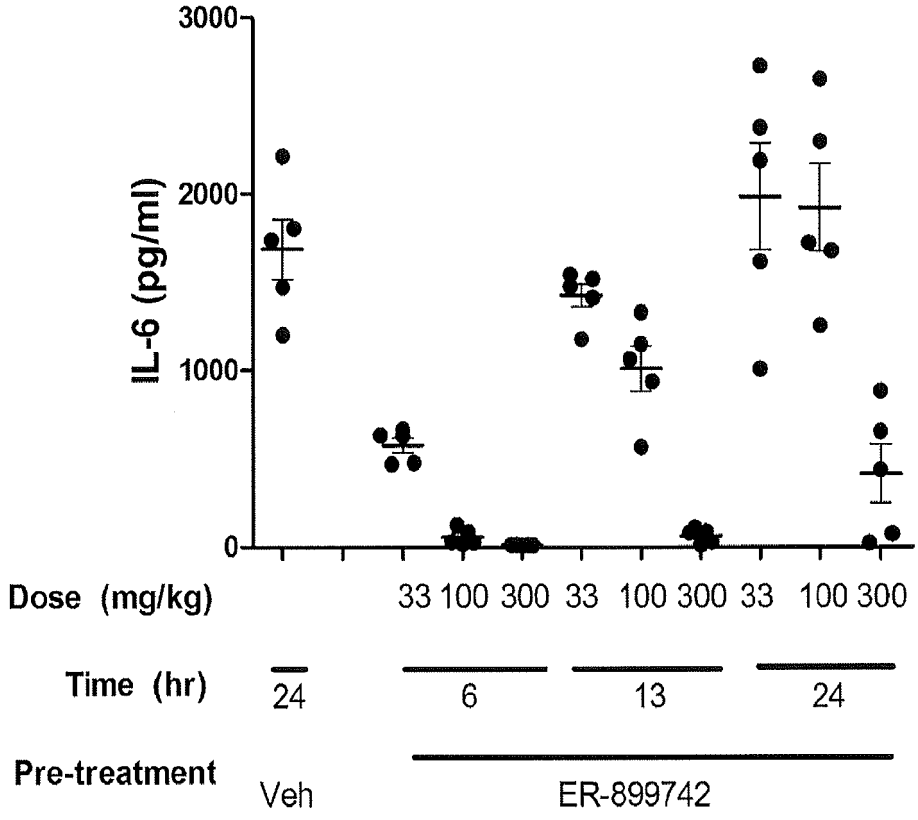
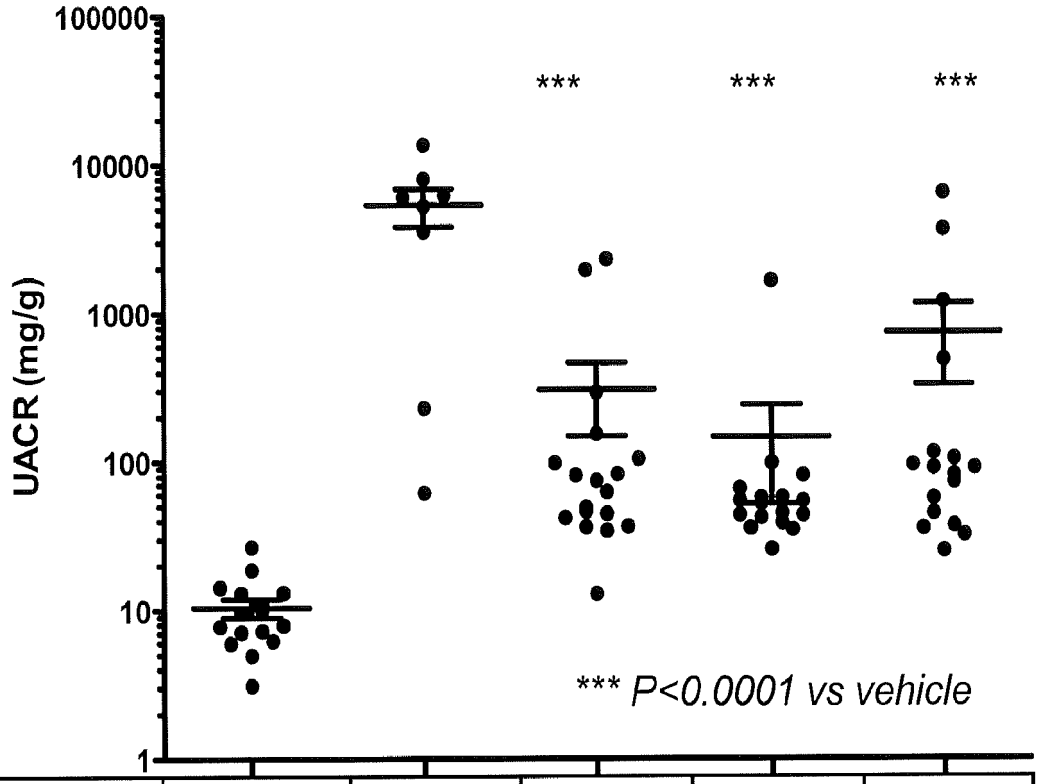

3000
2000
1000
0
IL-6 (pg/ml)
Dose (mg/kg)
33 100 300 33 100 300 33 100 300
Time (hr)
24
6
13
24
Pre-treatment
Veh
ER-899742

FIG. 2A



Treatment	Pre-disease	Veh	-742	-742	-742
Dose (mpk)	---	---	33	100	300
Duration (wks)	---	21	21	21	21
Age (wks)	9	50	50	50	50

FIG. 2B

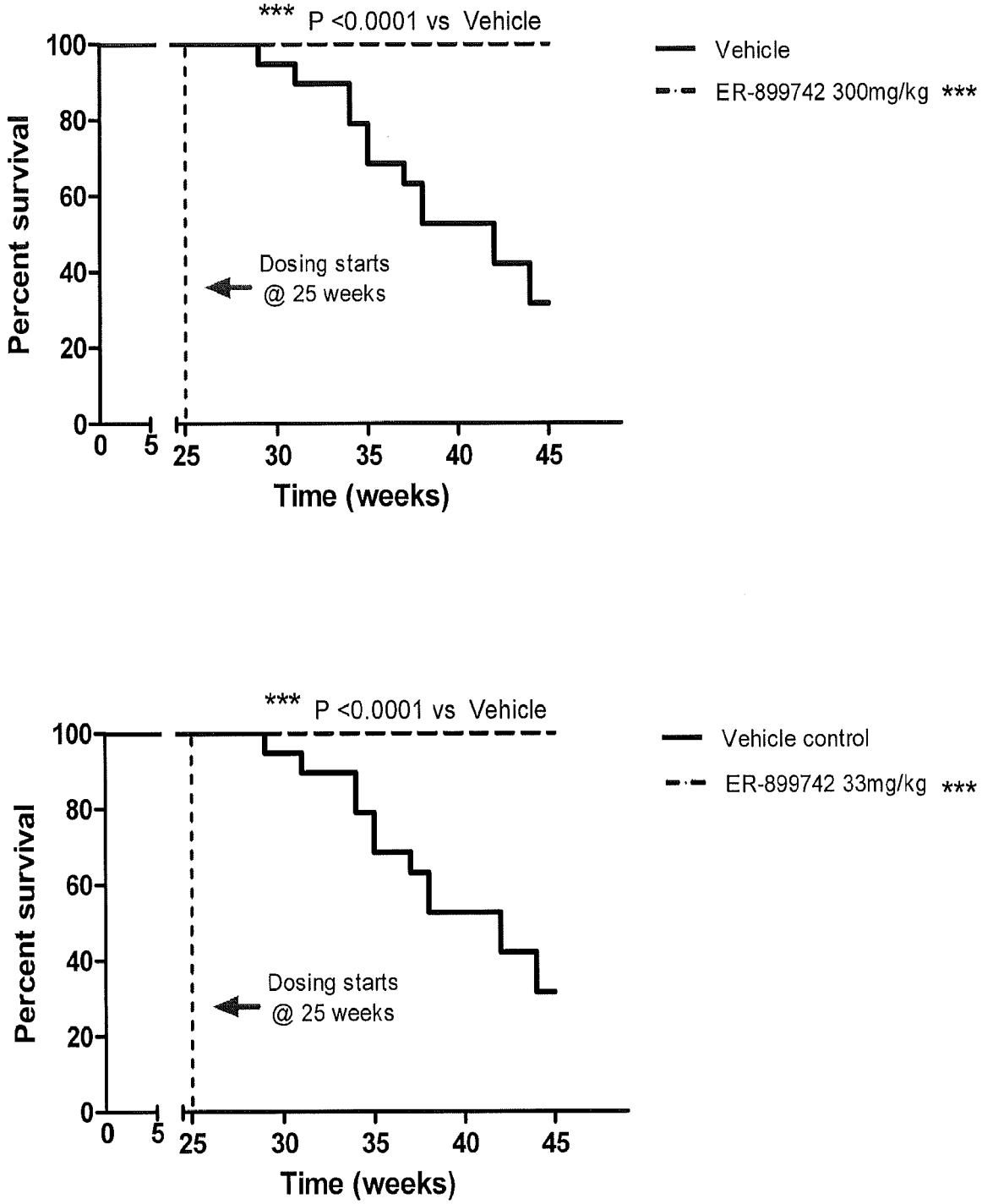
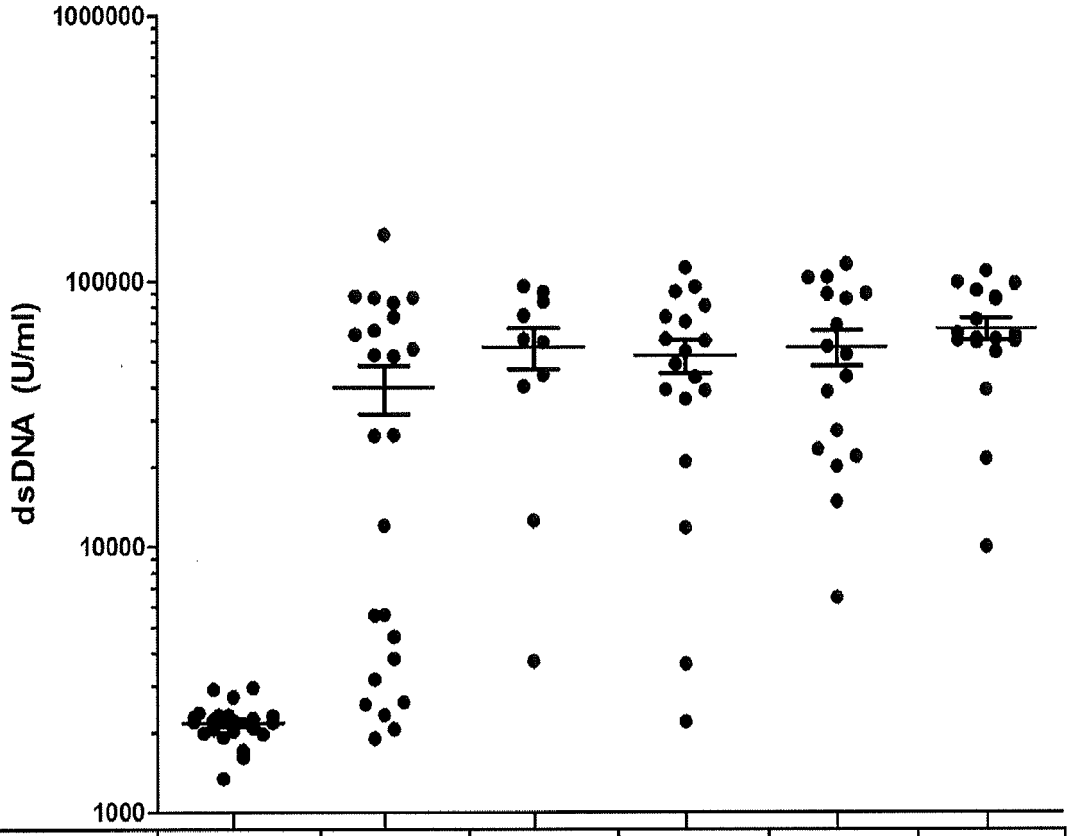
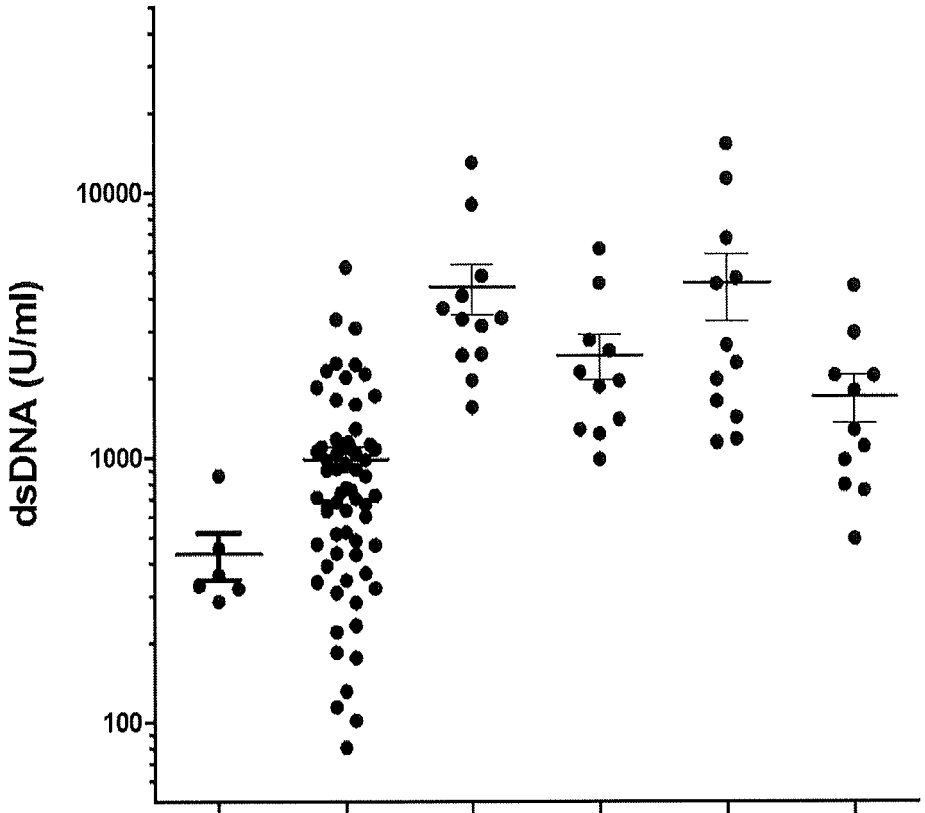

*** P <0.0001 vs Vehicle
Vehicle
ER-899742 300mg/kg ***
Percent survival
100
80
60
40
20
0
Dosing starts
@ 25 weeks
0
5
25
30
35
40
45
Time (weeks)
*** P <0.0001 vs Vehicle
Vehicle control
ER-899742 33mg/kg ***
Percent survival
Dosing starts
@ 25 weeks
Time (weeks)

FIG. 2C



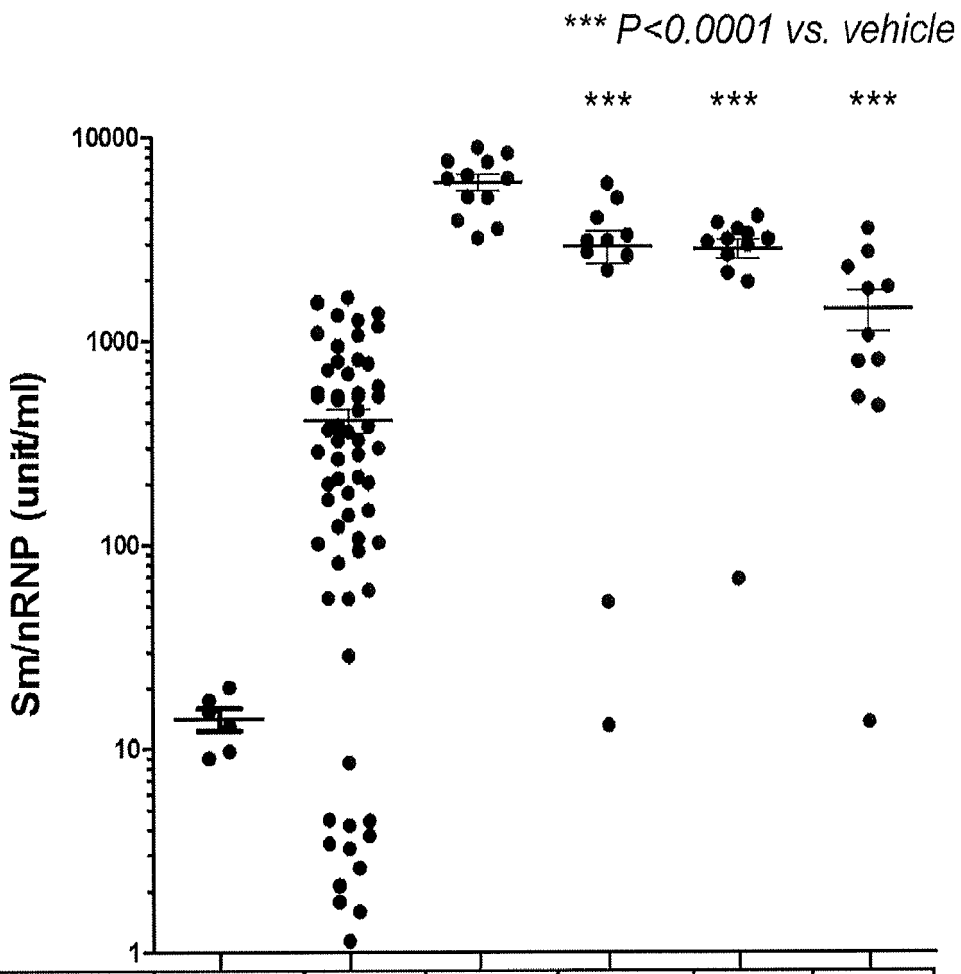
Treatment	Pre-disease	Pre-dosing	Veh	-742	-742	-742
Dose (mpk)	---	---	---	33	100	300
Duration (wks)	---	--	17	17	17	17
Age (wks)	9	27	46	46	46	46

FIG. 3A



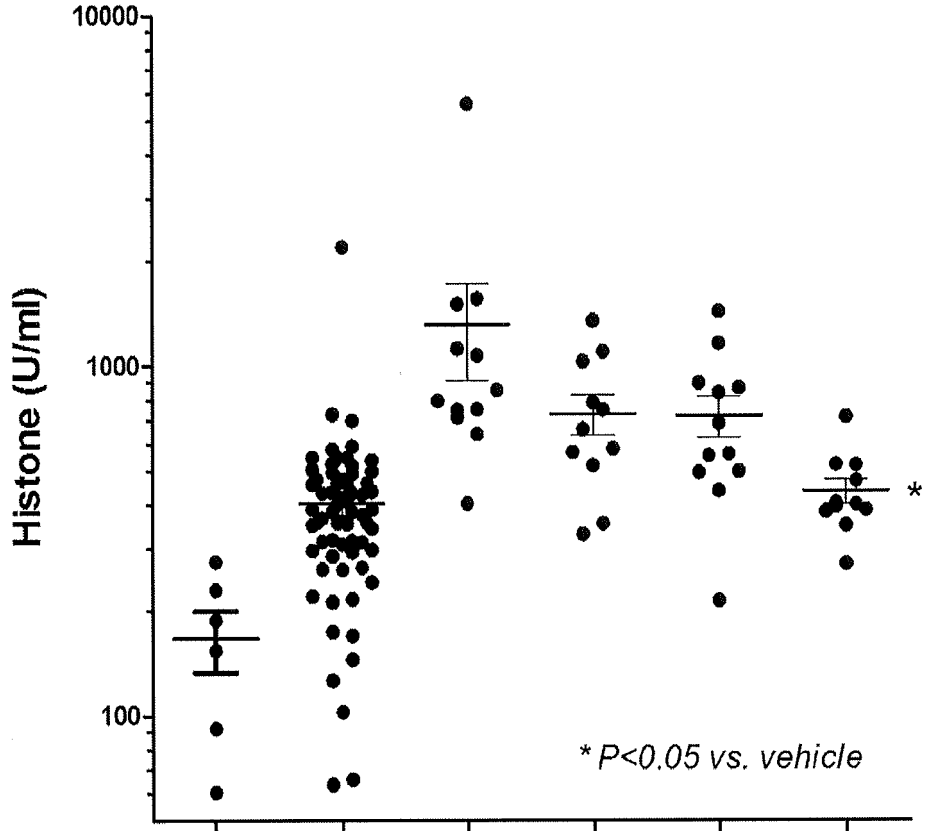
Treatment	Normal	Pre-dose	Pris + veh	Pris + -742	Pris + -742	Pris + -742
Dose (mpk)	---	--	--	33	100	300
Duration post-pristane (wks)	--	9	23	23	23	23
Duration of dosing	--	--	13	13	13	13
Age (wks)	18	18	32	32	32	32

FIG. 3B



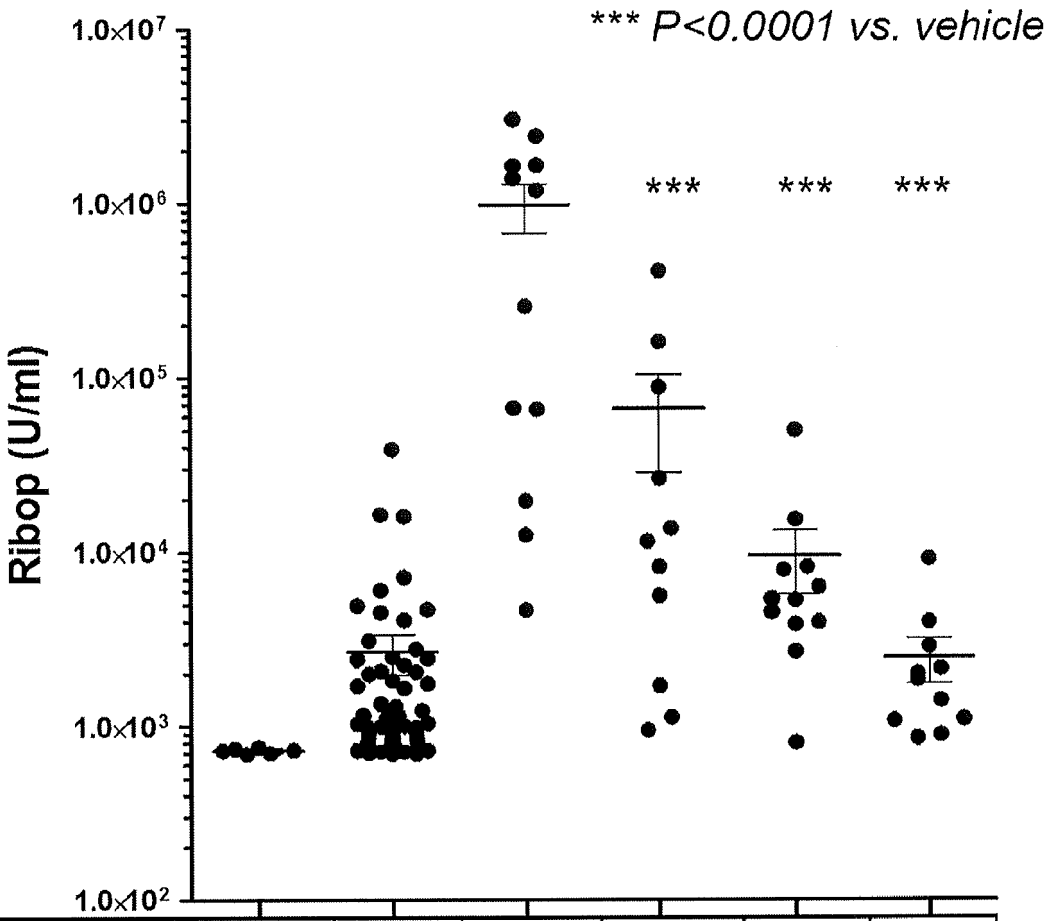
Treatment	Normal	Pre-dose	Pris + veh	Pris + -742	Pris + -742	Pris + -742
Dose (mpk)	---	--	--	33	100	300
Duration post-pristane (wks)	--	9	23	23	23	23
Duration of dosing	--	--	13	13	13	13
Age (wks)	18	18	32	32	32	32

FIG. 3C



Treatment	Normal	Pre-dose	Pris + veh	Pris + -742	Pris + -742	Pris + -742
Dose (mpk)	---	--	--	33	100	300
Duration post-pristane (wks)	--	9	23	23	23	23
Duration of dosing	--	--	13	13	13	13
Age (wks)	18	18	32	32	32	32

FIG. 3D

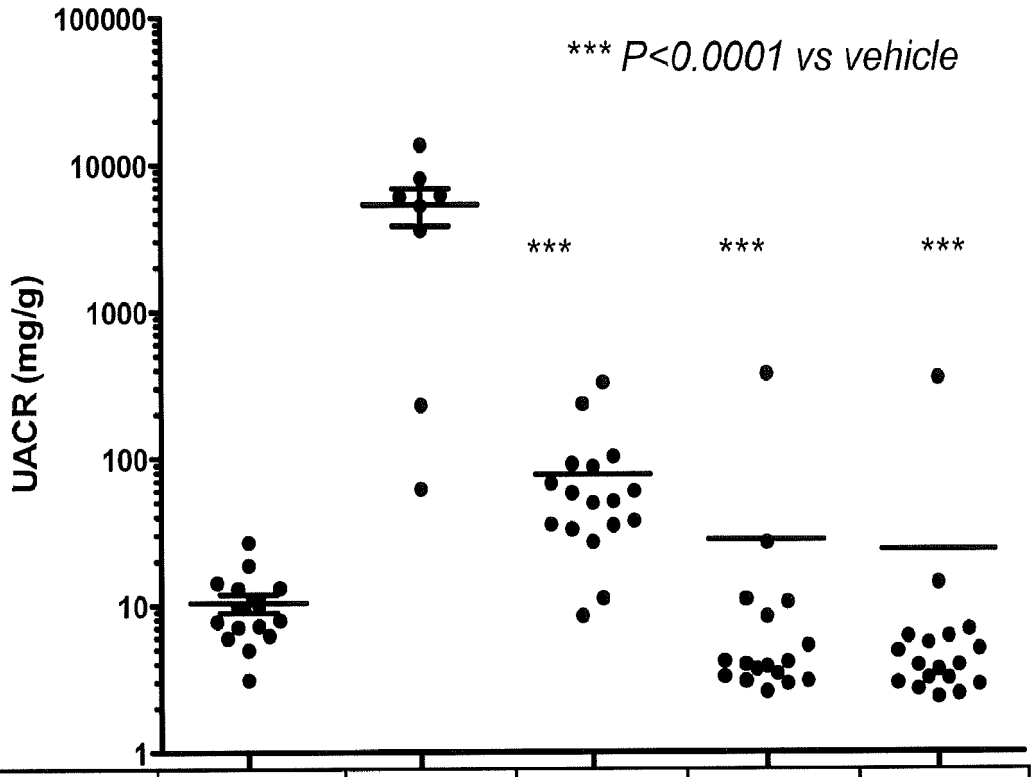


Treatment	Normal	Pre-dose	Pris + veh	Pris + -742	Pris + -742	Pris + -742
Dose (mpk)	---	--	--	33	100	300
Duration post-pristane (wks)	--	9	23	23	23	23
Duration of dosing	--	--	13	13	13	13
Age (wks)	18	18	32	32	32	32

FIG. 3E

Gene Number	Gene Name
1	Oas3
2	Ifi27l2a
3	**Ifi44** *
4	Oasl2
5	**Irf7** *
6	**Ifit1** *
7	Cmpk2
8	Xaf1
9	Mx1
10	Fcgr1
11	Mmp8
12	Ddx60
13	Ifi204
14	**Usp18** *
15	Ifi202b
16	**Siglec1** *
17	**Isg15** *
18	Herc6
19	Ifit3
20	Fpr1
21	Bst2
22	Cxcl10
23	Ms4a6c
24	Mmp9
25	Ccr2
26	Cd38
27	Tlr7
28	Prf1
29	C1qa
Twenty nine (29) genes significantly altered between Pristane + Vehicle vs. uninduced PBS control (P<0.05, at least 1.5 fold change)	
* Significantly reduced by ER-899742 vs. vehicle-treated pristane-induced mice (6 genes) (P<0.05, at least 1.5 fold change)	

FIG. 4A



Treatment	Pre-disease	Veh	-464	-464	-464
Dose (mpk)	---	---	33	100	300
Duration (wks)	---	21	21	21	21
Age (wks)	9	50	50	50	50

FIG. 4B

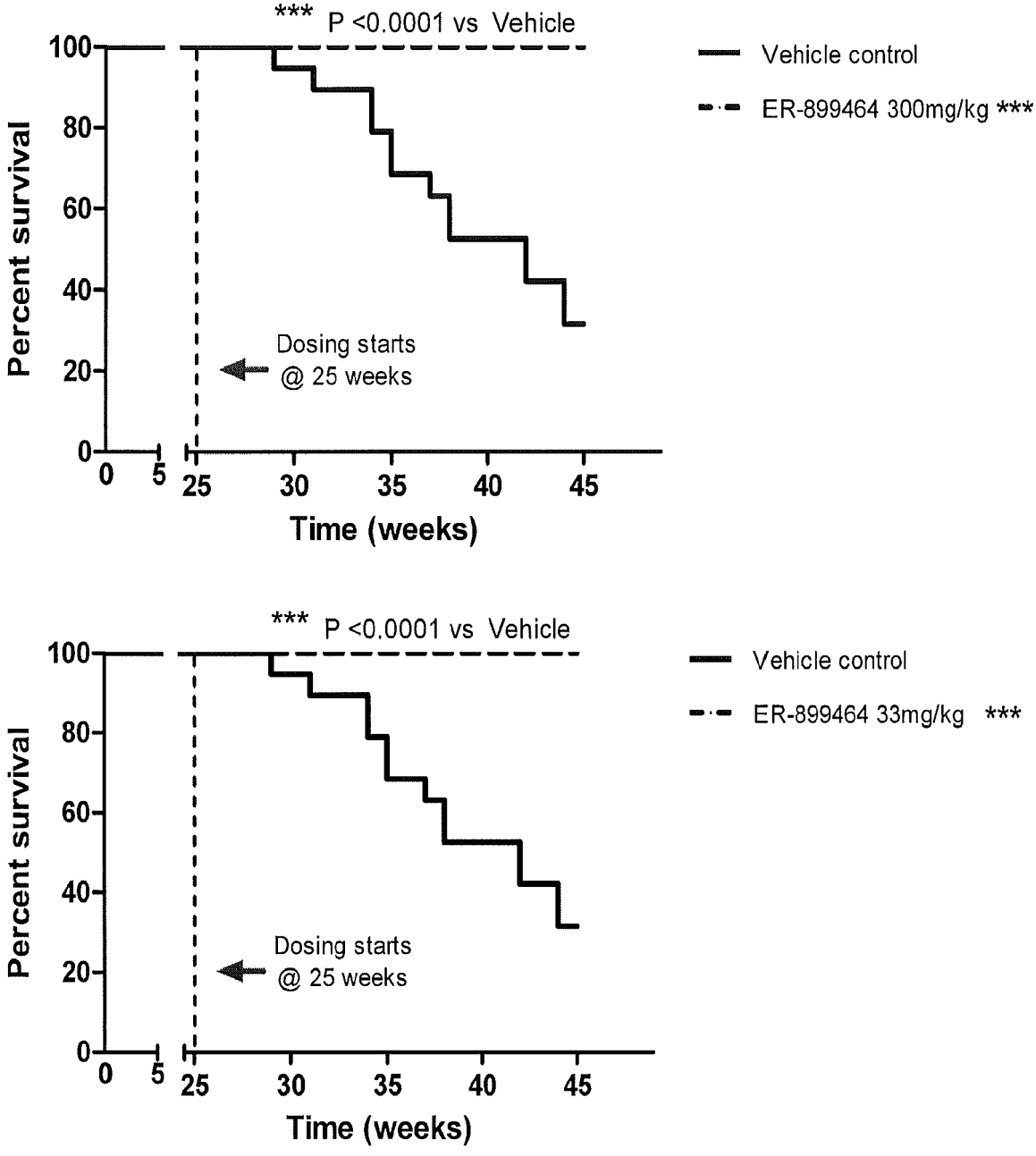
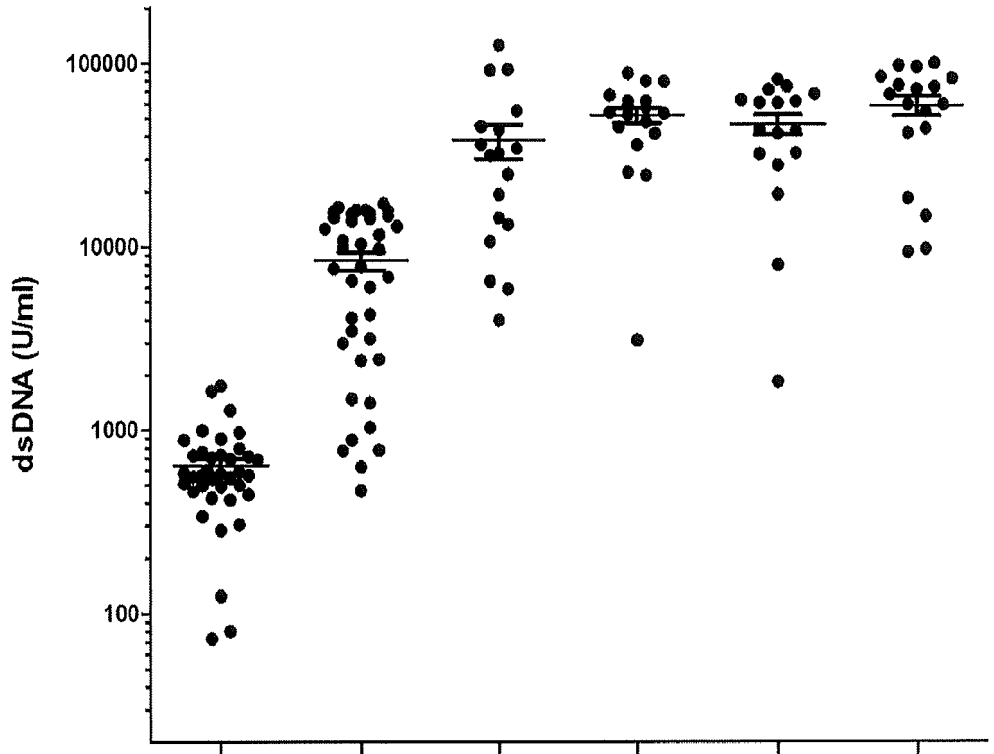
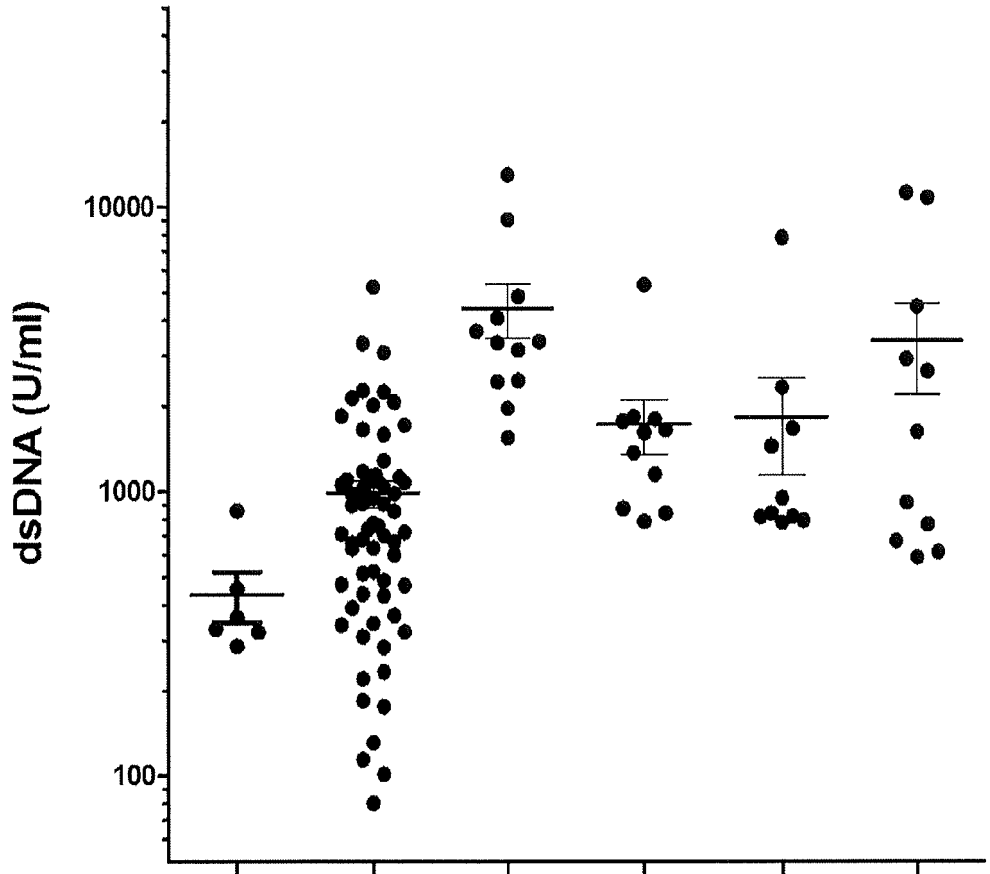

*** P <0.0001 vs Vehicle
Percent survival
100
80
60
40
20
0
0
5
25
30
35
40
45
Time (weeks)
Dosing starts
@ 25 weeks
Vehicle control
ER-899464 300mg/kg ***
*** P <0.0001 vs Vehicle
Percent survival
Time (weeks)
Dosing starts
@ 25 weeks
Vehicle control
ER-899464 33mg/kg ***

FIG. 4C



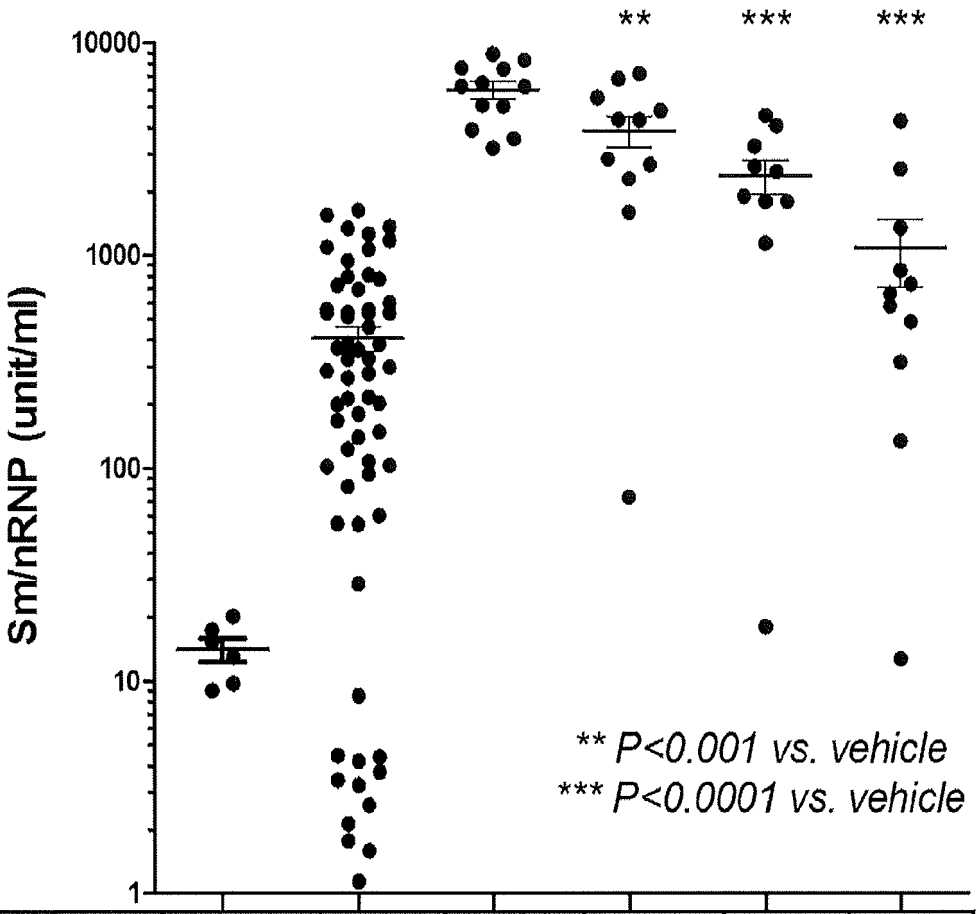
Treatment	Pre-disease	Pre-dosing	Veh	-464	-464	-464
Dose (mpk)	---	---	---	33	100	300
Duration (wks)	---	--	17	17	17	17
Age (wks)	9	27	46	46	46	46

FIG. 5A



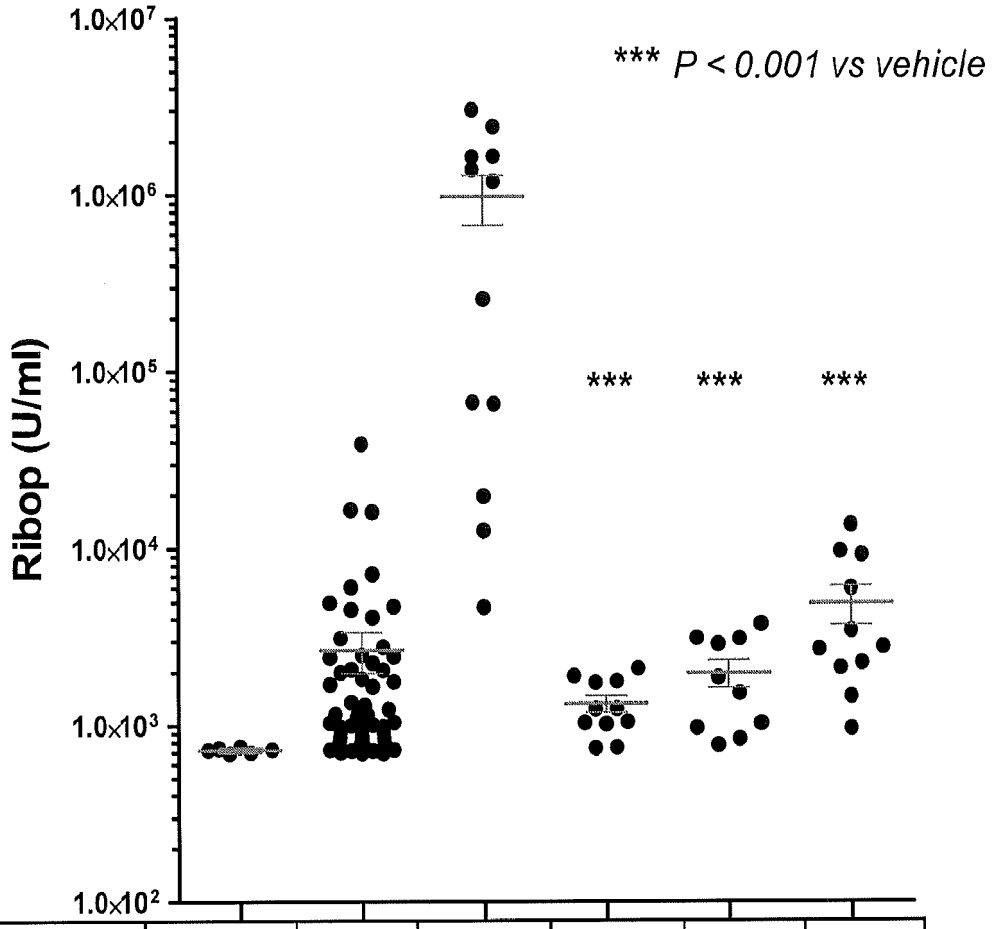
Treatment	Normal	Pre-dose	Pris + veh	Pris + -464	Pris + -464	Pris + -464
Dose (mpk)	---	--	--	33	100	300
Duration post-pristane (wks)	--	9	23	23	23	23
Duration of dosing	--	--	13	13	13	13
Age (wks)	18	18	32	32	32	32

FIG. 5B



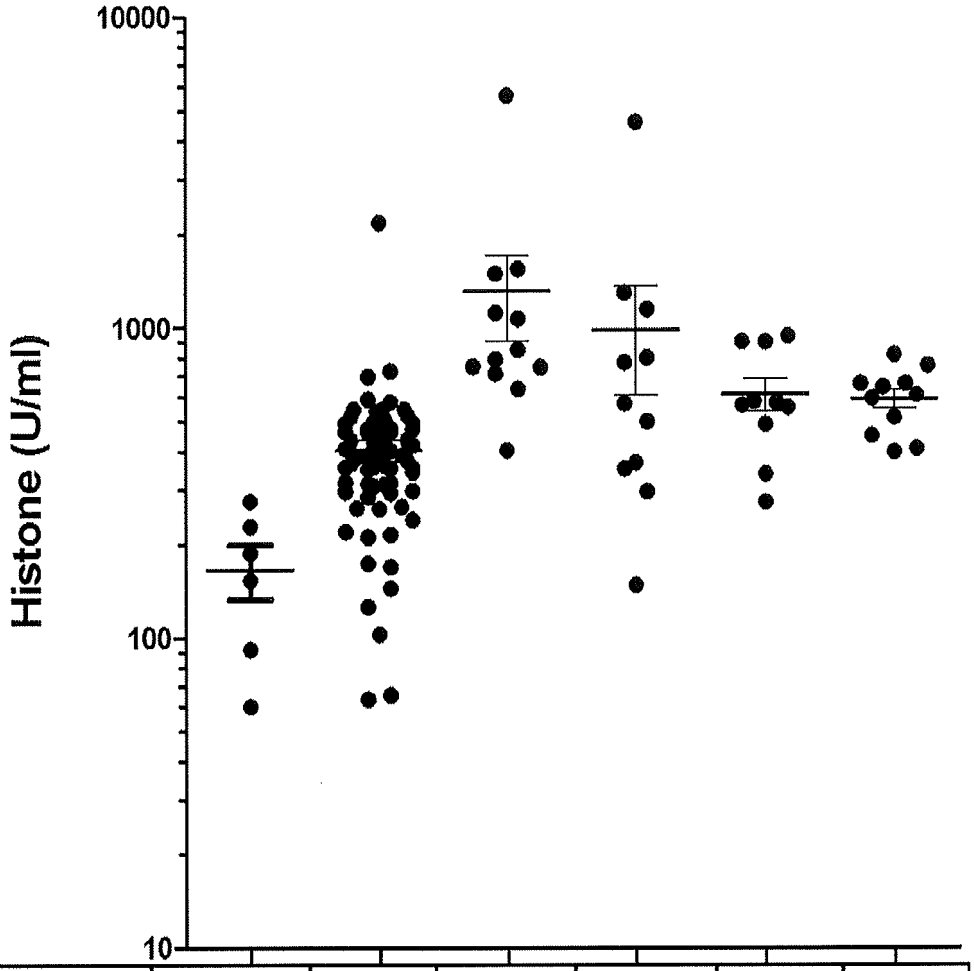
Treatment	Normal	Pre-dose	Pris + veh	Pris + -464	Pris + -464	Pris + -464
Dose (mpk)	---	--	--	33	100	300
Duration post-pristane (wks)	--	9	23	23	23	23
Duration of dosing	--	--	13	13	13	13
Age (wks)	18	18	32	32	32	32

FIG. 5C



Treatment	Normal	Pre-dose	Pris + veh	Pris + -464	Pris + -464	Pris + -464
Dose (mpk)	---	--	--	33	100	300
Duration post-pristane (wks)	--	9	23	23	23	23
Duration of dosing	--	--	13	13	13	13
Age (wks)	18	18	32	32	32	32

FIG. 5D



Treatment	Normal	Pre-dose	Pris + veh	Pris + -464	Pris + -464	Pris + -464
Dose (mpk)	---	--	--	33	100	300
Duration post-pristane (wks)	--	9	23	23	23	23
Duration of dosing	--	--	13	13	13	13
Age (wks)	18	18	32	32	32	32

FIG. 6A

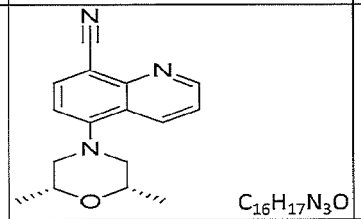
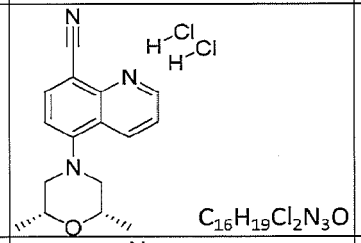
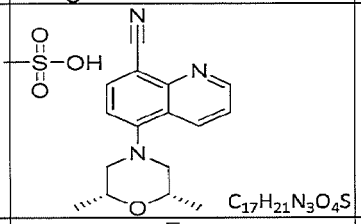
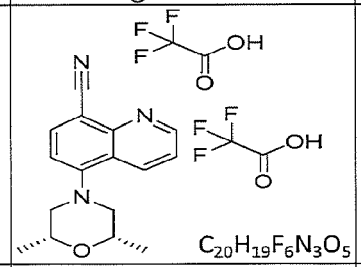
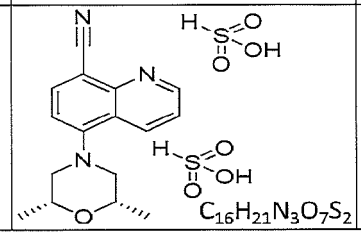
Number	Structure	MW	HEK /hTLR7 IC50 (uM)	HEK/ hTLR9 IC50 (uM)	Chemical Name	1H-NMR	MS
ER-878952	 $C_{16}H_{17}N_3O$	267.3	0.1136	>30	5-((2R,6S)-2,6-dimethylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, methanol-d4) d ppm 0.93 (6 H, d) 1.97 - 2.12 (2 H, m) 2.31 - 2.45 (2 H, m) 3.35 - 3.47 (2 H, m) 7.09 - 7.22 (1 H, m) 7.53 - 7.62 (1 H, m) 8.01 - 8.10 (1 H, m) 8.46 - 8.56 (1 H, m) 8.86 - 8.95 (1 H, m),	LCMS (ESI+) calcd for $C_{16}H_{17}N_3O$ ($M+H^+$) 268.3, found 268.1
ER-878952-02	 $C_{16}H_{19}Cl_2N_3O$	340.3	0.0738	>20	5-((2R,6S)-2,6-dimethylmorpholino)quinoline-8-carbonitrile dihydrochloride	1H NMR (400 MHz, METHANOL-d4) d ppm 0.93 (6 H, d) 1.97 - 2.12 (2 H, m) 2.31 - 2.45 (2 H, m) 3.35 - 3.47 (2 H, m) 7.09 - 7.22 (1 H, m) 7.53 - 7.62 (1 H, m) 8.01 - 8.10 (1 H, m) 8.46 - 8.56 (1 H, m) 8.86 - 8.95 (1 H, m)	LCMS (ESI+) calcd for C16 H17 N3 O (M+H+) 268.3, found 268.1
ER-878952-13	 $C_{17}H_{21}N_3O_4S$	363.4	0.1410	>20	5-((2R,6S)-2,6-dimethylmorpholino)quinoline-8-carbonitrile methanesulfonate	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.26 (d, *J*=6.34 Hz, 7 H) 2.84 - 2.98 (m, 14 H) 3.40 - 3.54 (m, 2 H) 4.02 - 4.13 (m, 2 H) 7.42 (d, *J*=8.54 Hz, 1 H) 8.22 - 8.35 (m, 2 H) 9.27 (d, *J*=1.22 Hz, 1 H) 9.44 (d, *J*=4.64 Hz, 1 H) 12.42 (br. s., 2 H)	
ER-878952-24	 $C_{20}H_{19}F_6N_3O_5$	495.4	0.0490	>20	5-((2R,6S)-2,6-dimethylmorpholino)quinoline-8-carbonitrile bis(2,2,2-trifluoroacetate)	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 0.94 (d, *J*=6.45 Hz, 9 H) 1.91 (br. s., 1 H) 2.02 (dd, *J*=7.32, 3.81 Hz, 3 H) 2.39 (t, *J*=11.57 Hz, 3 H) 3.38 - 3.43 (m, 3 H) 7.16 (d, *J*=7.91 Hz, 1 H) 7.57 (dd, *J*=8.50, 4.39 Hz, 1 H) 8.07 (d, *J*=8.20 Hz, 1 H) 8.52 (dd, *J*=8.64, 1.61 Hz, 1 H) 8.91 (dd, *J*=4.39, 1.76 Hz, 1 H)	
ER-878952-25	 $C_{16}H_{21}N_3O_7S_2$	431.5	0.1200	>20	5-((2R,6S)-2,6-dimethylmorpholino)quinoline-8-carbonitrile bis(sulfonate)	^{1}H NMR (400 MHz, DMSO-d_6) d ppm 1.09 (d, *J*=6.15 Hz, 8 H) 2.52 (t, *J*=11.13 Hz, 3 H) 3.26 - 3.30 (m, 5 H) 3.86 - 3.95 (m, 3 H) 7.16 (d, *J*=8.20 Hz, 1 H) 7.62 (ddd, *J*=8.50, 4.10, 1.17 Hz, 1 H) 8.19 (dd, *J*=7.91, 1.17 Hz, 1 H) 8.51 (dd, *J*=8.64, 1.32 Hz, 1 H) 8.99 (dt, *J*=2.71, 1.43 Hz, 1 H)	

FIG. 6B

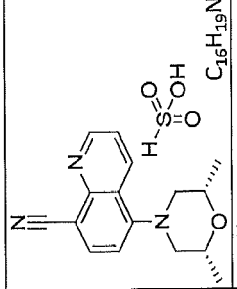
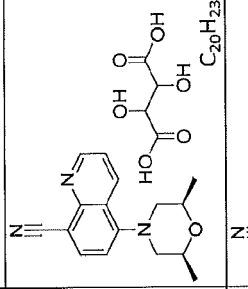
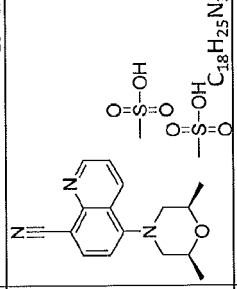
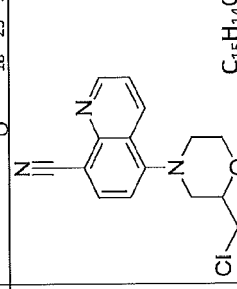
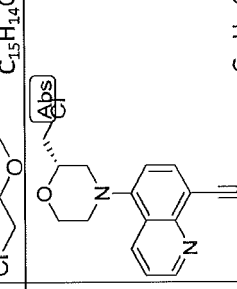
ER-878952-26	 $C_{16}H_{19}N_3O_4S$	349.4	0.0880	>20	5-((2R,6S)-2,6-dimethylmorpholino)quinoline-8-carbonitrile sulfonate	^{1}H NMR (400 MHz, DMSO-d_6) d ppm 1.04 - 1.25 (m, 17 H) 2.44 - 2.67 (m, 8 H) 3.30 (s, 3 H) 3.27 (s, 3 H) 3.82 - 4.09 (m, 7 H) 7.12 - 7.31 (m, 3 H) 7.56 - 7.75 (m, 3 H) 8.09 - 8.33 (m, 3 H) 8.49 - 8.74 (m, 4 H) 8.98 (ddd, J=4.32, 3.00, 1.76 Hz, 20 H) 9.09 (m, 1 H)
ER-87895227	 $C_{20}H_{23}N_3O_7$	417.4	0.1250	>20	5-((2S,6R)-2,6-dimethylmorpholino)quinoline-8-carbonitrile 2,3-dihydroxysuccinate	
ER-878952-28	 $C_{18}H_{25}N_3O_7S_2$	459.5	0.1040	>20	5-((2S,6R)-2,6-dimethylmorpholino)quinoline-8-carbonitrile dimethanesulfonate	
ER-879484	 $C_{15}H_{14}ClN_3O$	287.7	0.3435	>20	5-(2-(chloromethyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.20 (d, J=6.15 Hz, 1 H) 3.31 (s, 1 H) 3.64 (dd, J=5.57, 0.88 Hz, 2 H) 4.00 - 4.08 (m, 3 H) 7.61 (dd, J=8.50, 4.39 Hz, 1 H) 8.09 - 8.14 (m, 2 H)
ER-879570	 $C_{15}H_{14}ClN_3O$	287.7	0.2230	>20	(S)-5-(2-(chloromethyl)morpholino)quinoline-8-carbonitrile	

FIG. 6C

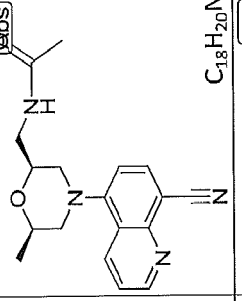
ER-879689	 $C_{18}H_{20}N_4O_2$	324.4	0.3400	>20	N-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)acetamide	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 0.81 (br. s., 1 H) 1.23 - 1.28 (m, 5 H) 1.54 (s, 4 H) 2.02 - 2.06 (m, 4 H) 2.61 (s, 1 H) 2.63 (s, 1 H) 2.66 (s, 1 H) 2.69 (s, 1 H) 3.17 - 3.24 (m, 2 H) 3.26 - 3.28 (m, 1 H) 3.30 (s, 1 H) 3.60 - 3.66 (m, 1 H) 3.96 - 4.04 (m, 2 H) 5.89 (br. s., 1 H) 7.05 (d, *J*=7.91 Hz, 1 H) 7.24 (d, *J*=0.59 Hz, 4 H) 7.50 (dd, *J*=8.50, 4.39 Hz, 1 H) 8.01 (s, 1 H) 8.03 (s, 1 H) 8.41 (dd, *J*=8.50, 1.76 Hz, 1 H) 9.05 - 9.07 (m, 1 H)
ER-879713	$C_{21}H_{26}N_4O_2$	366.5	0.0920	>20	N-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)pivalamide	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.21 - 1.28 (m, 13 H) 2.03 - 2.11 (m, 1 H) 2.49 - 2.54 (m, 1 H) 2.60 - 2.67 (m, 2 H) 2.87 - 2.91 (m, 2 H) 3.19 - 3.33 (m, 3 H) 3.43 - 3.47 (m, 1 H) 3.60 - 3.67 (m, 1 H) 3.98 - 4.05 (m, 2 H) 6.27 (br. s., 1 H) 7.05 (d, *J*=7.91 Hz, 1 H) 7.23 - 7.26 (m, 2 H) 7.52 (dd, *J*=8.50, 4.39 Hz, 1 H) 8.03 (d, *J*=7.91 Hz, 1 H) 8.44 (dd, *J*=8.50, 1.46 Hz, 1 H) 9.07 (dd, *J*=4.39, 1.76 Hz, 1 H)
ER-879739	$C_{15}H_{15}N_3O$	253.3	0.2750	>20	5-(2-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-*d*$_4$) d ppm 1.16 - 1.21 (m, 4 H) 2.67 (dd, *J*=12.01, 9.96 Hz, 1 H) 2.94 - 3.02 (m, 1 H) 3.29 - 3.36 (m, 2 H) 3.93 - 4.01 (m, 4 H) 7.21 (d, *J*=7.91 Hz, 1 H) 7.61 (dd, *J*=8.50, 4.39 Hz, 1 H) 8.11 (d, *J*=7.91 Hz, 1 H) 8.63 (dd, *J*=8.64, 1.61 Hz, 1 H) 8.94 (dd, *J*=4.39, 1.76 Hz, 1 H)
ER-880191	$C_{16}H_{17}N_3O$	267.3	0.3095	>20	5-((2S,6S)-2,6-dimethylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-*d*$_4$) d ppm 1.20 (d, *J*=6.15 Hz, 8 H) 1.38 (d, *J*=6.45 Hz, 1 H) 2.55 - 2.64 (m, 3 H) 3.29 - 3.36 (m, 3 H) 3.97 - 4.06 (m, 2 H) 7.18 - 7.22 (m, 1 H) 7.62 (dd, *J*=8.50, 4.39 Hz, 1 H) 8.09 - 8.13 (m, 1 H) 8.64 (dd, *J*=8.64, 1.61 Hz, 1 H) 8.94 (dd, *J*=4.39, 1.46 Hz, 1 H)
ER-880639	$C_{16}H_{17}N_3O$	276.3	0.3490	>20	5-(2-ethylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.00 (t, *J*=7.47 Hz, 3 H) 1.46 - 1.67 (m, 2 H) 2.05 (br. s., 4 H) 2.70 - 2.74 (m, 1 H) 3.03 (td, *J*=11.57, 3.22 Hz, 1 H) 3.21 - 3.31 (m, 2 H) 3.69 - 3.76 (m, 1 H) 3.96 (td, *J*=11.35, 2.49 Hz, 1 H) 4.04 - 4.09 (m, 1 H) 7.07 (d, *J*=7.91 Hz, 1 H) 7.50 (dd, *J*=8.50, 4.10 Hz, 1 H) 8.03 (d, *J*=7.91 Hz, 1 H) 8.46 (dd, *J*=8.50, 1.76 Hz, 1 H) 9.06 (dd, *J*=4.10, 1.76 Hz, 1 H)

FIG. 6D

ER-884884	$C_{16}H_{18}N_4O$	282.3	0.3060	>20	5-((2S,6R)-2-(aminomethyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.27 (d, J=6.15 Hz, 11 H) 2.63 - 2.67 (m, 2 H) 2.69 - 2.74 (m, 2 H) 2.97 (d, J=13.48 Hz, 1 H) 3.15 (s, 1 H) 3.18 (s, 1 H) 3.41 (s, 3 H) 3.37 (s, 3 H) 4.81 - 4.85 (m, 53 H) 7.24 (d, J=8.20 Hz, 3 H) 7.60 - 7.63 (m, 2 H) 8.12 (s, 1 H) 8.14 (s, 1 H) 8.60 (d, J=1.46 Hz, 1 H) 8.62 (d, J=1.46 Hz, 1 H) 8.96 (dd, J=4.10, 1.76 Hz, 2 H)
ER-885047	$C_{16}H_{17}N_3O_2$	283.3	0.9558	>20	5-(2-(hydroxymethyl)-6-methylmorpholino)quinoline-8-carbonitrile	
ER-885113	$C_{16}H_{20}N_2O_2$	272.4	0.5285	>20	(2R,6S)-4-(8-methoxyquinolin-5-yl)-2,6-dimethylmorpholine	
ER-885160	$C_{16}H_{19}N_3O_2$	285.3	2.1600	>20	5-((2R,6S)-2,6-dimethylmorpholino)quinoline-8-carboxamide	1H NMR (400 MHz, METHANOL-d4) d ppm 1.21 (6 H, d) 2.63 - 2.81 (2 H, m) 3.34 - 3.48 (2 H, m) 3.95 - 4.12 (2 H, m) 7.34 - 7.48 (1 H, m) 7.91 - 8.02 (1 H, m) 8.49 - 8.67 (1 H, m) 9.08 - 9.18 (1 H, m) 9.18 - 9.27 (1 H, m)
ER-885211	$C_{15}H_{15}N_3O$	253.3	0.0420	>20	(R)-5-(2-methylmorpholino)quinoline-8-carbonitrile	LCMS (ESI+) calcd for C16 H19 N3 O2 (M+H+) 286.3, found 286.3

FIG. 6E

ER-885493	$C_{16}H_{17}N_3O_2$	283.3	0.1043	>20	5-((2R,6R)-2-(hydroxymethyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 1.21 (3 H, d) 2.58 - 2.66 (1 H, m) 2.67 - 2.75 (1 H, m) 3.30 - 3.37 (1 H, m) 3.38 - 3.44 (1 H, m) 3.53 (1 H, dd) 3.63 (1 H, dd) 3.91 - 3.98 (1 H, m) 4.00 - 4.08 (1 H, m) 7.15 - 7.25 (1 H, m) 7.56 - 7.65 (1 H, m) 8.07 - 8.15 (1 H, m) 8.56 - 8.68 (1 H, m) 8.88 - 8.96 (1 H, m)	LCMS (ESI+) calcd for C16 H17 N3 O2 (M+H+) 284.3, found 284.3
ER-885612	$C_{17}H_{19}N_3O_2$	373.5	0.2750	>20	5-((2R,6R)-2-(methoxymethyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 1.22 (3 H, d) 2.62 (1 H, t) 2.82 (1 H, t) 3.30 - 3.41 (2 H, m) 3.99 - 4.27 (2 H, m) 4.41 (1 H, d) 4.53 (1 H, d) 7.18 - 7.32 (1 H, m) 7.62 (1 H, dd) 8.12 (1 H, d) 8.64 (1 H, dd) 8.89 - 8.99 (1 H, m)	LCMS (ESI+) calcd for C16 H16 F N3 O (M+H+) 286.3, found 286.3
ER-885618	$C_{23}H_{23}N_3O_2$	373.5	0.0270	>20	5-((2R,6R)-2-((benzyloxy)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 1.21 (d, J=6.45 Hz, 4 H) 2.59 - 2.63 (m, 1 H) 2.65 (s, 1 H) 2.70 - 2.76 (m, 1 H) 3.30 - 3.43 (m, 3 H) 3.50 - 3.54 (m, 1 H) 3.58 - 3.63 (m, 1 H) 4.01 - 4.06 (m, 1 H) 4.08 - 4.13 (m, 1 H) 4.54 (s, 2 H) 4.82 - 4.87 (m, 7 H) 7.18 - 7.32 (m, 5 H) 7.57 - 7.61 (m, 1 H) 8.11 (d, J=7.91 Hz, 1 H) 8.58 - 8.62 (m, 1 H) 8.92 - 8.94 (m, 1 H)	
ER-885621	$C_{16}H_{16}FN_3O$	285.3	0.1800	>20	5-((2R,6R)-2-(fluoromethyl)-6-methylmorpholino)quinoline-8-carbonitrile		
ER-885807	$C_{18}H_{21}N_3O_2$	311.4	0.1560	>20	5-((2R,6R)-2-(ethoxymethyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, CHLOROFORM-d) d ppm 1.20 (t, J=7.03 Hz, 3 H) 1.26 (d, J=6.45 Hz, 3 H) 2.00 (s, 1 H) 2.68 (s, 1 H) 2.71 (d, J=1.46 Hz, 1 H) 2.74 (s, 1 H) 2.78 (s, 1 H) 2.81 (s, 1 H) 2.84 (s, 1 H) 3.27 (d, J=12.01 Hz, 1 H) 3.38 (d, J=11.72 Hz, 1 H) 3.49 - 3.64 (m, 4 H) 4.02 - 4.14 (m, 2 H) 5.77 (br. s., 1 H) 7.14 (d, J=8.20 Hz, 1 H) 7.24 - 7.25 (m, 2 H) 7.64 (dd, J=8.50, 4.39 Hz, 1 H) 8.09 (d, J=8.20 Hz, 1 H) 8.61 (dd, J=8.50, 1.46 Hz, 1 H) 9.13 - 9.15 (m, 1 H)	

FIG. 6F

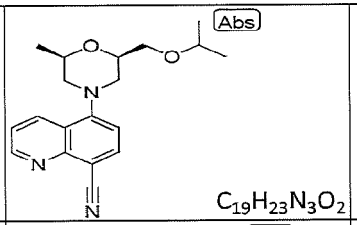
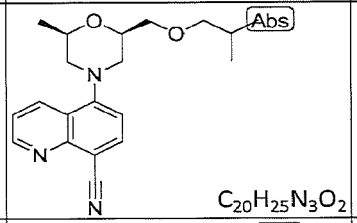
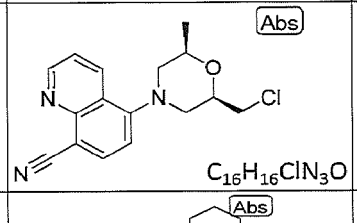
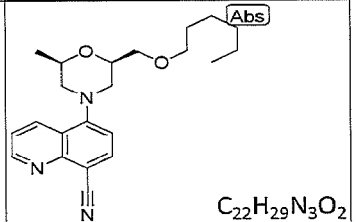
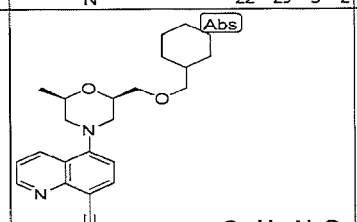
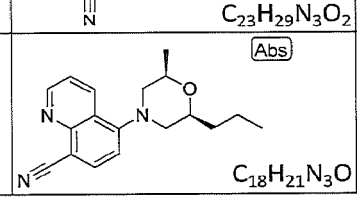
ER-885808	 $C_{19}H_{23}N_3O_2$	325.4	0.0880	>20	5-((2R,6R)-2-(isopropoxymethyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.15 (dd, *J*=7.91, 6.15 Hz, 6 H) 1.25 (d, *J*=6.15 Hz, 3 H) 2.65 (s, 1 H) 2.68 (d, *J*=1.46 Hz, 1 H) 2.70 - 2.73 (m, 1 H) 2.76 (s, 1 H) 3.25 (s, 1 H) 3.28 (s, 1 H) 3.41 - 3.47 (m, 2 H) 3.59 - 3.66 (m, 3 H) 4.01 - 4.08 (m, 1 H) 7.10 (d, *J*=7.91 Hz, 1 H) 7.24 - 7.24 (m, 4 H) 7.54 - 7.57 (m, 1 H) 8.04 (s, 1 H) 8.06 (s, 1 H) 8.52 (dd, *J*=8.50, 1.76 Hz, 1 H) 9.09 (dd, *J*=4.10, 1.76 Hz, 1 H)	
ER-885892	 $C_{20}H_{25}N_3O_2$	339.4	0.0740	>20	5-((2R,6R)-2-(isobutoxymethyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 0.87 (d, *J*=6.74 Hz, 7 H) 1.25 (d, *J*=6.15 Hz, 4 H) 1.68 (s, 21 H) 1.81 - 1.88 (m, 1 H) 2.63 - 2.66 (m, 1 H) 2.69 - 2.74 (m, 1 H) 3.19 - 3.28 (m, 4 H) 3.41 - 3.48 (m, 3 H) 3.59 (dd, *J*=9.96, 4.98 Hz, 1 H) 7.05 (s, 1 H) 7.07 (s, 1 H) 7.24 (s, 6 H) 7.48 - 7.51 (m, 1 H) 8.02 (s, 1 H) 8.04 (s, 1 H) 8.45 (d, *J*=1.76 Hz, 1 H) 8.47 (d, *J*=1.76 Hz, 1 H) 9.06 (dd, *J*=4.39, 1.76 Hz, 1 H)	
ER-885906	 $C_{16}H_{16}ClN_3O$	301.8	0.1980	>20	5-((2R,6R)-2-(chloromethyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.27 (d, *J*=6.15 Hz, 7 H) 1.60 (s, 83 H) 2.67 - 2.75 (m, 2 H) 3.48 (s, 1 H) 3.51 - 3.53 (m, 2 H) 3.64 (d, *J*=4.69 Hz, 1 H) 7.09 (d, *J*=8.20 Hz, 1 H) 7.24 - 7.24 (m, 31 H) 7.50 - 7.54 (m, 1 H) 8.04 (d, *J*=8.20 Hz, 1 H) 8.44 (d, *J*=7.03 Hz, 1 H)	
ER-885929	 $C_{22}H_{29}N_3O_2$	367.5	0.2190	>20	5-((2R,6R)-2-((hexyloxy)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 0.81 - 0.87 (m, 3 H) 1.21 - 1.33 (m, 11 H) 1.51 - 1.64 (m, 3 H) 2.62 - 2.76 (m, 3 H) 3.26 (dt, *J*=11.72, 2.05 Hz, 1 H) 3.38 - 3.50 (m, 5 H) 3.58 (dd, *J*=9.96, 5.27 Hz, 1 H) 3.99 - 4.11 (m, 2 H) 7.06 (d, *J*=7.91 Hz, 1 H) 7.24 (s, 1 H) 7.47 - 7.51 (m, 1 H) 8.01 (d, *J*=8.20 Hz, 1 H) 8.45 (dd, *J*=8.50, 1.46 Hz, 1 H) 9.05 (dd, *J*=4.10, 1.47 Hz, 1 H)	
ER-885930	 $C_{23}H_{29}N_3O_2$	379.5	0.0710	>20	5-((2R,6R)-2-((cyclohexylmethoxy)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 0.83 - 0.93 (m, 2 H) 1.10 - 1.27 (m, 6 H) 1.55 - 1.73 (m, 5 H) 2.66 - 2.70 (m, 1 H) 2.73 (d, *J*=7.32 Hz, 1 H) 2.76 (d, *J*=1.17 Hz, 1 H) 2.79 (s, 1 H) 3.24 - 3.32 (m, 3 H) 3.39 - 3.52 (m, 2 H) 3.59 (dd, *J*=9.96, 4.98 Hz, 1 H) 3.80 (br. s., 7 H) 4.01 - 4.12 (m, 2 H) 7.11 (d, *J*=7.91 Hz, 1 H) 7.24 - 7.25 (m, 2 H) 7.58 (dd, *J*=8.79, 4.39 Hz, 1 H) 8.07 (d, *J*=7.91 Hz, 1 H) 8.54 - 8.57 (m, 1 H) 9.11 (dd, *J*=4.39, 1.76 Hz, 1 H)	
ER-886131	 $C_{18}H_{21}N_3O$	295.4	0.1240	>20	5-((2R,6S)-2-methyl-6-propylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, CDCl3-d) d ppm 0.93 (3 H, t) 1.25 (3 H, d) 1.35 - 1.66 (4 H, m) 2.57 - 2.74 (2 H, m) 3.26 (2 H, d) 3.79 - 3.91 (1 H, m) 3.92 - 4.05 (1 H, m) 6.99 - 7.14 (1 H, m) 7.49 - 7.59 (1 H, m) 7.98 - 8.12 (1 H, m) 8.43 - 8.53 (1 H, m) 9.02 - 9.14 (1 H, m)	LCMS (ESI+) calcd for C18 H21 N3 O (M+H+) 296.3, found 296.1

FIG. 6G

ER-886133	$C_{16}H_{16}FN_3O$	285.3	0.3410	>20	5-((2S,6S)-2-(fluoromethyl)-6-methylmorpholino)quinoline-8-carbonitrile	
ER-886134	$C_{16}H_{16}ClN_3O$	301.8	0.2700	>20	5-((2S,6S)-2-(chloromethyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.27 (d, *J*=6.45 Hz, 4 H) 1.67 (br. s., 9 H) 2.64 (s, 1 H) 2.67 (d, *J*=1.76 Hz, 1 H) 2.69 (s, 1 H) 2.72 (s, 1 H) 2.75 (d, *J*=1.46 Hz, 1 H) 2.78 (s, 1 H) 3.26 (t, *J*=2.05 Hz, 1 H) 3.29 (t, *J*=2.05 Hz, 1 H) 3.48 - 3.55 (m, 3 H) 3.65 (dd, *J*=11.43, 4.98 Hz, 1 H) 4.04 - 4.14 (m, 2 H) 7.09 (d, *J*=8.20 Hz, 1 H) 7.24 (s, 4 H) 7.50 - 7.54 (m, 1 H) 8.03 (s, 1 H) 8.05 (s, 1 H) 8.44 (dd, *J*=8.50, 1.76 Hz, 1 H) 9.07 (dd, *J*=4.10, 1.76 Hz, 1 H)
ER-886137	$C_{24}H_{25}N_3O_2$	387.5	0.2500	>20	5-((2R,6R)-2-((2,6-dimethylphenoxy)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.23 - 1.29 (m, 6 H) 1.55 (s, 9 H) 2.26 (s, 7 H) 2.68 (d, *J*=11.13 Hz, 1 H) 2.72 (s, 1 H) 2.82 (d, *J*=11.43 Hz, 1 H) 2.86 (s, 1 H) 3.29 (s, 1 H) 3.32 (s, 1 H) 3.47 - 3.53 (m, 1 H) 3.55 (s, 1 H) 3.91 - 3.95 (m, 1 H) 4.07 - 4.16 (m, 2 H) 4.25 - 4.29 (m, 1 H) 6.52 (s, 2 H) 6.60 (s, 1 H) 7.07 (s, 1 H) 7.09 (s, 1 H) 7.24 (d, *J*=0.88 Hz, 5 H) 7.49 - 7.53 (m, 1 H) 8.02 (s, 1 H) 8.04 (s, 1 H) 8.45 - 8.48 (m, 1 H) 9.07 (dd, *J*=4.10, 1.76 Hz, 1 H)
ER-886211	$C_{18}H_{21}N_3O$	295.4	2.7795	>20	5-((2R,6S)-2,6-diethylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 0.99 - 1.03 (m, 7 H) 1.47 - 1.57 (m, 2 H) 1.59 - 1.66 (m, 2 H) 2.61 (s, 1 H) 2.64 (s, 1 H) 2.67 (s, 1 H) 3.27 (s, 1 H) 3.30 (s, 1 H) 3.71 - 3.77 (m, 2 H) 7.06 (s, 1 H) 7.08 (s, 1 H) 7.24 - 7.24 (m, 6 H) 7.51 (dd, *J*=8.50, 4.10 Hz, 1 H) 8.02 (s, 1 H) 8.04 (s, 1 H) 8.45 - 8.48 (m, 1 H) 9.07 (dd, *J*=4.39, 1.76 Hz, 1 H)
ER-886212	$C_{20}H_{25}N_3O$	323.4	0.2410	>20	5-((2R,6S)-2-methyl-6-pentylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, CDCl3-d) d ppm 0.88 (3 H, t) 1.25 (3 H, d) 1.28 - 1.35 (3 H, m) 1.39 - 1.53 (2 H, m) 1.54 - 1.65 (1 H, m) 2.60 - 2.69 (2 H, m) 2.73 - 2.83 (2 H, m) 3.19 - 3.33 (2 H, m) 3.76 - 3.88 (1 H, m) 3.93 - 4.06 (1 H, m) 7.00 - 7.14 (1 H, m) 7.48 - 7.61 (1 H, m) 7.98 - 8.10 (1 H, m) 8.38 - 8.56 (1 H, m) 9.00 - 9.13 (1 H, m)
						LCMS (ESI+) calcd for C20 H25 N3 O (M+H+) 324.4, found 324.5

FIG. 6H

ER-886250	$C_{16}H_{15}N_3O_2$	281.3	0.1860	>10.0	5-((2R,6R)-2-formyl-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, CDCl3-d) 1.35 (3 H, d) 2.65 - 2.85 (2 H, m) 3.24 (1H, d) 3.58 (1 H, d) 4.09 -4.014 (1 H, m) 4.50 (1 H, d) 7.11 (1 H, d) 7.53 (1 H, d) 8.05 (1 H, d) 8.53 (1 H, d) 9.08 (1 H, s) 9.75 (1 H, s)
ER-886250	Abs $C_{16}H_{15}N_3O_2$	309.4	0.1670	>20	5-((2R,6R)-2-formyl-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.37(d, 3 H) 2.64 - 2.88 (m, 2 H) 3.33 (dt, *J*=11.96, 2.14 Hz, 1 H) 3.56 (dt, *J*=11.96, 2.46 Hz, 1 H) 4.06 - 4.22 (m, 1 H) 4.40 (dd, *J*=10.79, 2.88 Hz, 1 H) 7.07 - 7.18 (m, 1 H) 7.50 - 7.61 (m, 1 H) 8.00 - 8.14 (m, 1 H) 8.46 (dd, *J*=8.65, 1.82 Hz, 1 H) 9.05 - 9.15 (m, 1 H) 9.73 (s, 1 H)
ER-886355	Abs $C_{24}H_{25}N_3O_2$	387.5	0.0250	>20	5-((2R,6R)-2-((benzyloxy)methyl)-6-ethylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 0.97 - 1.01 (m, 8 H) 1.52 - 1.65 (m, 20 H) 2.62 - 2.66 (m, 1 H) 2.68 - 2.76 (m, 1 H) 3.27 (s, 1 H) 3.30 (s, 1 H) 3.39 (s, 1 H) 3.42 (s, 1 H) 3.51 (dd, *J*=9.96, 5.86 Hz, 2 H) 3.64 (dd, *J*=10.25, 4.98 Hz, 2 H) 4.57 (s, 5 H) 5.28 (s, 3 H) 7.05 (s, 1 H) 7.07 (s, 1 H) 7.23 - 7.27 (m, 19 H) 7.29 - 7.33 (m, 8 H) 7.49 (dd, *J*=8.50, 4.39 Hz, 2 H) 8.01 (s, 1 H) 8.03 (s, 1 H) 8.44 (dd, *J*=8.79, 1.76 Hz, 2 H) 9.05 - 9.06 (m, 1 H)
ER-886360	Abs $C_{25}H_{26}N_4O_2$	414.5	0.3710	>20	N-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)-2-phenylpropanamide	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.15 - 1.18 (m, 4 H) 1.43 (dd, *J*=7.03, 3.81 Hz, 1 H) 1.51 - 1.57 (m, 5 H) 2.42 (s, 1 H) 2.45 (s, 1 H) 2.55 (s, 1 H) 2.58 (s, 1 H) 3.16 - 3.23 (m, 2 H) 3.62 (s, 1 H) 6.94 (s, 1 H) 6.96 (s, 1 H) 7.02 (s, 1 H) 7.04 (s, 1 H) 7.26 - 7.37 (m, 12 H) 7.50 - 7.53 (m, 1 H) 8.02 - 8.05 (m, 1 H) 8.39 - 8.42 (m, 1 H) 9.07 - 9.09 (m, 1 H)
ER-886418	Abs $C_{18}H_{19}N_3O_2$	387.5	0.2770	>20	5-((2R,6R)-2-(1-hydroxyallyl)-6-methylmorpholino)quinoline-8-carbonitrile	
ER-886431	Abs $C_{18}H_{19}N_3O_2$	387.5	0.2070	>20	5-((2R,6R)-2-((S)-1-hydroxyallyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.30 (d, 3 H) 2.57 - 2.72 (m, 1 H) 2.80 (t, *J*=11.32 Hz, 1 H) 3.30 (d, 2 H) 3.77 - 3.90 (m, 1 H) 4.02 - 4.19 (m, 2 H) 5.23 - 5.34 (m, 1 H) 5.35 - 5.47 (m, 1 H) 5.83 - 5.99 (m, 1 H) 7.09 (d, *J*=7.90 Hz, 1 H) 7.48 - 7.60 (m, 1 H) 8.00 - 8.12 (m, 1 H) 8.43 (dd, *J*=8.55, 1.71 Hz, 1 H) 9.09 (dd, *J*=4.27, 1.71 Hz, 1 H)

LCMS (ESI+) calcd for C18H19N3O2 (M+H+): 310.15, found: 310.16

FIG. 6I

ER-886432	$C_{27}H_{28}N_4O_2$	440.5	0.3050		>20	N-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)-1-phenylcyclobutanecarboxamide	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 0.81 - 0.88 (m, 1 H) 1.10 (d, *J*=6.15 Hz, 4 H) 1.22 - 1.29 (m, 2 H) 1.62 (br. s., 1 H) 1.84 - 1.93 (m, 1 H) 2.08 - 2.16 (m, 1 H) 2.31 - 2.38 (m, 2 H) 2.40 - 2.56 (m, 2 H) 2.72 - 2.80 (m, 1 H) 2.83 - 2.90 (m, 1 H) 3.07 - 3.14 (m, 2 H) 3.22 - 3.29 (m, 1 H) 3.37 - 3.44 (m, 1 H) 3.80 - 3.88 (m, 2 H) 5.57 - 5.62 (m, 1 H) 6.90 (d, *J*=7.91 Hz, 1 H) 7.21 - 7.26 (m, 2 H) 7.28 - 7.37 (m, 4 H) 7.47 (dd, *J*=8.50, 4.10 Hz, 1 H) 7.99 (d, *J*=7.91 Hz, 1 H) 8.35 (dd, *J*=8.50, 1.46 Hz, 1 H) 9.04 (dd, *J*=4.10, 1.46 Hz, 1 H)	
ER-886480	$C_{18}H_{19}N_3O_2$	309.4	0.2070		>20	5-((2R,6R)-2-((R)-1-hydroxyallyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.29 (d, 3 H) 2.23 (d, *J*=3.85 Hz, 1 H) 2.65 (dd, *J*=11.75, 10.25 Hz, 1 H) 2.91 (dd, *J*=11.96, 10.47 Hz, 1 H) 3.23 - 3.39 (m, 2 H) 3.94 (ddd, *J*=10.47, 4.27, 2.35 Hz, 1 H) 4.02 - 4.13 (m, 1 H) 4.28 - 4.41 (m, 1 H) 5.27 (dt, *J*=10.68, 1.50 Hz, 1 H) 5.41 (dt, *J*=17.09, 1.50 Hz, 1 H) 5.95 (ddd, *J*=17.30, 10.68, 5.77 Hz, 1 H) 7.09 (d, *J*=8.12 Hz, 1 H) 7.48 - 7.58 (m, 1 H) 8.05 (d, *J*=7.90 Hz, 1 H) 8.44 (dd, *J*=8.55, 1.71 Hz, 1 H) 9.08 (dd, *J*=4.27, 1.71 Hz, 1 H)	LCMS (ESI+) calcd for C18H19N3O2 (M+H+): 310.15, found: 310.14
ER-886507	$C_{20}H_{24}N_4O$	336.4	0.0750	13.287		5-((2R,6S)-2-methyl-6-(pyrrolidin-1-ylmethyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.28 (d, *J*=6.15 Hz, 4 H) 1.99 - 2.07 (m, 2 H) 2.15 (d, *J*=4.10 Hz, 2 H) 2.65 - 2.79 (m, 2 H) 3.12 - 3.25 (m, 3 H) 3.30 - 3.42 (m, 5 H) 3.67 - 3.74 (m, 2 H) 4.11 - 4.17 (m, 1 H) 4.29 - 4.35 (m, 1 H) 4.83 - 4.86 (m, 6 H) 7.24 (d, *J*=7.91 Hz, 1 H) 7.57 - 7.63 (m, 1 H) 8.13 (d, *J*=7.91 Hz, 1 H) 8.63 (dd, *J*=8.50, 1.76 Hz, 1 H) 8.96 (dd, *J*=4.10, 1.76 Hz, 1 H)
ER-886508	$C_{20}H_{26}N_4O$	338.5	0.1200	14.481		5-((2S,6R)-2-((diethylamino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.24 - 1.36 (m, 21 H) 2.65 - 2.75 (m, 3 H) 3.29 - 3.41 (m, 14 H) 4.81 - 4.85 (m, 12 H) 7.25 (d, *J*=8.20 Hz, 2 H) 7.62 (dd, *J*=8.50, 4.10 Hz, 1 H) 8.13 (d, *J*=7.91 Hz, 1 H) 8.62 - 8.65 (m, 1 H) 8.93 - 8.97 (m, 2 H)
ER-886509	$C_{23}H_{24}N_4O$	372.5	0.0440	3.94		5-((2S,6R)-2-((benzylamino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.28 (d, *J*=6.45 Hz, 4 H) 2.64 - 2.72 (m, 2 H) 2.74 - 2.79 (m, 1 H) 3.07 - 3.13 (m, 1 H) 3.22 (d, *J*=2.93 Hz, 2 H) 3.34 - 3.41 (m, 2 H) 4.09 - 4.13 (m, 1 H) 4.22 - 4.30 (m, 3 H) 4.82 - 4.85 (m, 9 H) 7.23 (d, *J*=8.20 Hz, 1 H) 7.43 - 7.50 (m, 5 H) 7.61 (dd, *J*=8.50, 4.39 Hz, 1 H) 8.12 (d, *J*=8.20 Hz, 1 H) 8.57 - 8.61 (m, 1 H) 8.94 - 8.96 (m, 1 H)

FIG. 6J

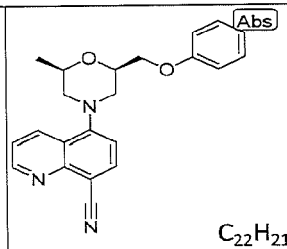
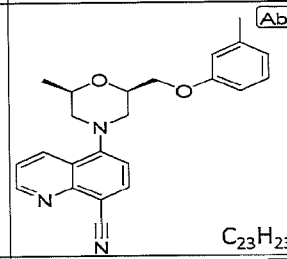
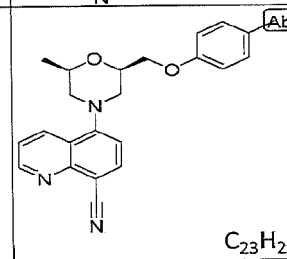
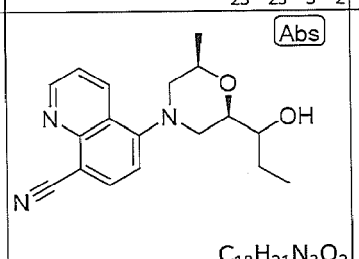
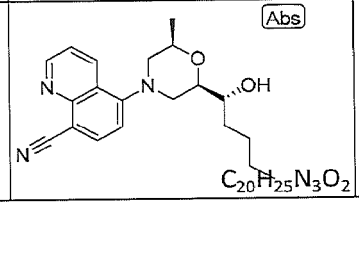
ER-886514	 $C_{22}H_{21}N_3O_2$	359.4	0.0030	>20	5-((2R,6R)-2-methyl-6-(phenoxymethyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.29 (d, *J*=6.15 Hz, 3 H) 1.96 (br. s., 9 H) 2.68 (s, 1 H) 2.71 (d, *J*=1.76 Hz, 1 H) 2.74 (s, 1 H) 2.84 - 2.90 (m, 1 H) 3.29 - 3.30 (m, 1 H) 3.33 (t, *J*=2.05 Hz, 1 H) 3.52 - 3.54 (m, 1 H) 3.56 (s, 1 H) 3.98 (dd, *J*=9.67, 6.74 Hz, 1 H) 4.10 (ddd, *J*=10.25, 6.45, 2.34 Hz, 1 H) 4.17 (dd, *J*=9.67, 4.69 Hz, 1 H) 4.28 - 4.32 (m, 1 H) 6.88 - 6.91 (m, 2 H) 6.93 - 6.98 (m, 1 H) 7.10 (d, *J*=7.91 Hz, 1 H) 7.24 - 7.29 (m, 6 H) 7.53 (dd, *J*=8.50, 4.39 Hz, 1 H) 8.04 (d, *J*=7.91 Hz, 1 H) 8.49 (dd, *J*=8.50, 1.76 Hz, 1 H) 9.08 (dd, *J*=4.39, 1.76 Hz, 1 H)	
ER-886515	 $C_{23}H_{23}N_3O_2$	373.5	0.0360	>20	5-((2R,6R)-2-methyl-6-((m-tolyloxy)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.29 (d, *J*=6.15 Hz, 3 H) 1.90 (br. s., 9 H) 2.30 (s, 3 H) 2.68 (s, 1 H) 2.70 (d, *J*=1.76 Hz, 1 H) 2.73 (s, 1 H) 2.82 - 2.86 (m, 1 H) 2.88 (s, 1 H) 3.29 (t, *J*=2.05 Hz, 1 H) 3.32 (s, 1 H) 3.48 - 3.53 (m, 1 H) 3.55 - 3.56 (m, 1 H) 3.93 - 3.98 (m, 1 H) 4.07 - 4.12 (m, 1 H) 4.16 (dd, *J*=9.67, 4.69 Hz, 1 H) 4.27 - 4.31 (m, 1 H) 6.68 - 6.73 (m, 2 H) 6.77 (d, *J*=7.32 Hz, 1 H) 7.09 (s, 1 H) 7.10 - 7.13 (m, 1 H) 7.15 - 7.17 (m, 1 H) 7.24 (s, 4 H) 7.52 (dd, *J*=8.50, 4.39 Hz, 1 H) 8.03 (s, 1 H) 8.05 (s, 1 H) 8.48 (dd, *J*=8.50, 1.76 Hz, 1 H) 9.08 (dd, *J*=4.39, 1.76 Hz, 1 H)	
ER-886516	 $C_{23}H_{23}N_3O_2$	373.5	0.0180	>20	5-((2R,6R)-2-methyl-6-((p-tolyloxy)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.31 (d, *J*=6.15 Hz, 3 H) 1.58 (s, 6 H) 2.29 (s, 3 H) 2.70 (s, 1 H) 2.73 (d, *J*=1.76 Hz, 1 H) 2.75 (s, 1 H) 2.85 (s, 1 H) 2.87 (d, *J*=1.46 Hz, 1 H) 2.90 (s, 1 H) 3.31 - 3.33 (m, 1 H) 3.34 - 3.35 (m, 1 H) 3.50 (s, 1 H) 3.55 (t, *J*=2.05 Hz, 1 H) 3.57 - 3.59 (m, 1 H) 3.97 (dd, *J*=9.67, 6.74 Hz, 1 H) 4.18 (d, *J*=4.69 Hz, 1 H) 4.16 (d, *J*=4.69 Hz, 1 H) 4.30 (s, 1 H) 6.80 - 6.83 (m, 2 H) 7.07 - 7.11 (m, 2 H) 7.13 (s, 1 H) 7.54 (dd, *J*=8.50, 4.10 Hz, 1 H) 8.05 (s, 1 H) 8.07 (s, 1 H) 8.48 (d, *J*=1.76 Hz, 1 H) 8.50 (d, *J*=1.76 Hz, 1 H) 9.09 (dd, *J*=4.10, 1.76 Hz, 1 H)	
ER-886520	 $C_{18}H_{21}N_3O_2$	311.4	0.2150	>20	5-((2R,6R)-2-(1-hydroxypropyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.04 (t, *J*=7.37 Hz, 3 H) 1.23 - 1.33 (m, 3 H) 1.44 1.72 (m, 2 H) 2.02 (d, 1 H) 2.64 (dd, *J*=11.96, 10.25 Hz, 1 H) 2.83 - 3.01 (m, 1 H) 3.24 - 3.43 (m, 2 H) 3.73 (dd, *J*=8.55, 4.27 Hz, 1 H) 3.76 - 3.90 (m, 1 H) 3.97 - 4.15 (m, 1 H) 7.06 - 7.15 (m, 1 H) 7.47 - 7.57 (m, 1 H) 8.00 - 8.11 (m, 1 H) 8.46 (dd, *J*=8.55, 1.71 Hz, 1 H) 9.01 - 9.14 (m, 1 H)	LCMS (ESI+) calcd for C18H21N3O2 (M+H+): 312.17, found: 312.2
ER-886530	 $C_{20}H_{25}N_3O_2$	339.4	0.0440	>20	5-((2R,6R)-2-((R)-1-hydroxypentyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 0.83 - 1.01 (m, 3 H) 1.20 - 1.30 (m, 3 H) 1.30 - 1.42 (m, 3 H) 1.44 - 1.60 (m, 3 H) 2.09 (d, *J*=3.42 Hz, 1 H) 2.63 (dd, *J*=11.75, 10.25 Hz, 1 H) 2.94 (dd, *J*=11.86, 10.15 Hz, 1 H) 3.20 - 3.44 (m, 2 H) 3.71 - 3.89 (m, 2 H) 3.99 - 4.14 (m, 1 H) 7.10 (d, *J*=7.90 Hz, 1 H) 7.51 (dd, *J*=8.55, 4.27 Hz, 1 H) 8.04 (d, *J*=7.90 Hz, 1 H) 8.46 (dd, *J*=8.65, 1.82 Hz, 1 H) 9.07 (dd, *J*=4.06, 1.71 Hz, 1 H)	LCMS (ESI+) calcd for C20H25N3O2 (M+H+): 340.20, found: 340.18

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FIG. 6K

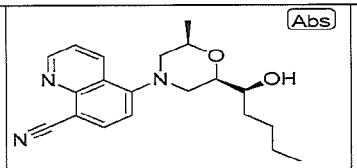
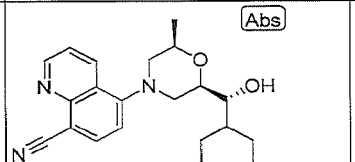
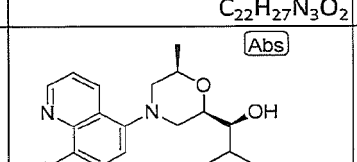
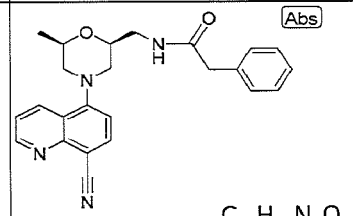
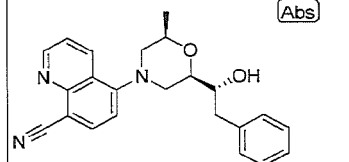
ER-886531	 $C_{20}H_{25}N_3O_2$	339.4	0.1930	>20	5-((2R,6R)-2-((S)-1-hydroxypentyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 0.82 - 0.97 (m, 3 H) 1.21 - 1.28 (m, 3 H) 1.29 - 1.48 (m, 3 H) 1.50 - 1.55 (m, 3 H) 2.59 - 2.70 (m, 1 H) 2.89 (dd, *J*=11.75, 10.47 Hz, 1 H) 3.21 - 3.34 (m, 2 H) 3.57 (m, 1 H) 3.72 - 3.86 (m, 1 H) 4.00 - 4.13 (m, 1 H) 7.05 - 7.15 (m, 1 H) 7.45 - 7.57 (m, 1 H) 7.99 - 8.10 (m, 1 H) 8.46 (dd, *J*=8.55, 1.71 Hz, 1 H) 9.04 - 9.17 (m, 1 H)	LCMS (ESI+) calcd for C20H25N3O2 (M+H+): 340.20, found: 340.26
ER-886532	 $C_{22}H_{27}N_3O_2$	365.5	0.0690	>20	5-((2R,6R)-2-((R)-cyclohexyl(hydroxy)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 0.98 - 1.37 (m, 6 H) 1.27 (d, 3 H) 1.47-1.72 (m, 2 H) 1.73 - 1.85 (m, 2 H) 2.02 (m, 1 H) 2.27 (d, 1 H) 2.63 (dd, *J*=11.96, 10.25 Hz, 1 H) 2.91 - 3.03 (m, 1 H) 3.25 - 3.41 (m, 2 H) 3.56 (ddd, *J*=7.42, 4.54, 3.20 Hz, 1 H) 3.95 (ddd, *J*=10.31, 4.75, 2.24 Hz, 1 H) 4.01 - 4.17 (m, 1 H) 7.06 - 7.15 (m, 1 H) 7.46 - 7.56 (m, 1 H) 8.06 (d, *J*=8.12 Hz, 1 H) 8.41 - 8.52 (m, 1 H) 9.01 - 9.13 (m, 1 H)	LCMS (ESI+) calcd for C22H27N3O2 (M+H+): 366.21, found: 366.22
ER-886533	 $C_{22}H_{27}N_3O_2$	365.5	0.0780	>20	5-((2R,6R)-2-((S)-cyclohexyl(hydroxy)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.07 - 1.37 (m, 6 H) 1.28 (d, 3H) 1.41 - 1.56 (m, 1 H) 1.62 - 1.74 (m, 2 H) 1.79 (br. s., 2 H) 1.87 (d, *J*=8.33 Hz, 1 H) 2.28 (d, *J*=6.20 Hz, 1 H) 2.63 (dd, *J*=11.96, 10.25 Hz, 1 H) 2.98 (dd, *J*=11.54, 10.47 Hz, 1 H) 3.16 - 3.35 (m, 3 H) 3.96 (ddd, *J*=10.31, 4.65, 2.35 Hz, 1 H) 4.00 - 4.15 (m, 1 H) 7.05 - 7.15 (m, 1 H) 7.47 - 7.56 (m, 1 H) 8.06 (d, *J*=7.90 Hz, 1 H) 8.39 - 8.52 (m, 1 H) 9.00 - 9.15 (m, 1 H)	LCMS (ESI+) calcd for C22H27N3O2 (M+H+): 366.21, found: 366.24
ER-886563	 $C_{24}H_{24}N_4O_2$	400.5	0.2100	>20	N-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)-2-phenylacetamide	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.14 (d, *J*=6.15 Hz, 3 H) 2.40 (br. s., 5 H) 2.48 (s, 1 H) 2.50 (s, 1 H) 2.53 (d, *J*=2.05 Hz, 1 H) 2.57 (d, *J*=11.43 Hz, 1 H) 3.18 - 3.24 (m, 3 H) 3.54 - 3.60 (m, 1 H) 3.64 (s, 2 H) 3.91 - 3.96 (m, 2 H) 5.99 (s, 1 H) 7.00 (s, 1 H) 7.02 (s, 1 H) 7.23 - 7.28 (m, 6 H) 7.31 - 7.38 (m, 2 H) 7.51 (dd, *J*=8.50, 4.39 Hz, 1 H) 8.01 (s, 1 H) 8.03 (s, 1 H) 8.40 (dd, *J*=8.50, 1.76 Hz, 1 H) 9.07 (dd, *J*=4.10, 1.76 Hz, 1 H)	
ER-886564	 $C_{23}H_{23}N_3O_2$	373.5	0.1020		5-((2R,6R)-2-((R)-1-hydroxy-2-phenylethyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.30 (d, *J*=6.41 Hz, 3 H) 2.38 (d, *J*=5.77 Hz, 1 H) 2.65 (dd, *J*=11.96, 10.25 Hz, 1 H) 2.84 - 2.94 (m, 1 H) 2.94 - 3.06 (m, 2 H) 3.15 - 3.33 (m, 2 H) 3.73 - 3.93 (m, 2 H) 3.95 - 4.12 (m, 1 H) 7.06 (d, *J*=8.12 Hz, 1 H) 7.23 - 7.29 (m, 3 H) 7.29 - 7.36 (m, 2 H) 7.49 (dd, *J*=8.55, 4.06 Hz, 1 H) 8.02 (d, *J*=7.90 Hz, 1 H) 8.38 (dd, *J*=8.55, 1.71 Hz, 1 H) 9.06 (dd, *J*=4.27, 1.71 Hz, 1 H)	LCMS (ESI+) calcd for C23H23N3O2 (M+H+): 374.18, found: 374.16

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FIG. 6L

ER-886565	$C_{23}H_{23}N_3O_2$	373.5	0.0490	> 2	5-((2R,6R)-2-((S)-1-hydroxy-2-phenylethyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.30 (d, *J*=6.41 Hz, 3 H) 2.38 (d, *J*=5.77 Hz, 1 H) 2.65 (dd, *J*=11.96, 10.25 Hz, 1 H) 2.84 - 2.94 (m, 1 H) 2.94 - 3.06 (m, 2 H) 3.15 - 3.33 (m, 2 H) 3.73 - 3.93 (m, 2 H) 3.95 - 4.12 (m, 1 H) 7.06 (d, *J*=8.12 Hz, 1 H) 7.23 - 7.29 (m, 3 H) 7.29 - 7.36 (m, 2 H) 7.49 (dd, *J*=8.55, 4.06 Hz, 1 H) 8.02 (d, *J*=7.90 Hz, 1 H) 8.38 (dd, *J*=8.55, 1.71 Hz, 1 H) 9.06 (dd, *J*=4.27, 1.71 Hz, 1 H)	LCMS (ESI+) calcd for C23H23N3O2 (M+H+): 374.18, found: 374.14
ER-886567	$C_{24}H_{25}N_3O_2$	387.5	0.0225	>20	5-((2R,6R)-2-((R)-1-hydroxy-3-phenylpropyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.27 (d, 4 H) 1.72 - 1.93 (m, 2 H) 2.07 (d, *J*=3.42 Hz, 1 H) 2.56 - 2.79 (m, 2 H) 2.85 - 2.99 (m, 2 H) 3.21 - 3.39 (m, 2 H) 3.75 - 3.88 (m, 2 H) 4.05 (m, 1 H) 7.09 (d, *J*=8.12 Hz, 1 H) 7.15 - 7.38 (m, 5 H) 7.51 (dd, *J*=8.55, 4.27 Hz, 1 H) 8.05 (d, *J*=7.90 Hz, 1 H) 8.44 (dd, *J*=8.55, 1.71 Hz, 1 H) 9.08 (dd, *J*=4.27, 1.71 Hz, 1 H)	LCMS (ESI+) calcd for C24H25N3O2 (M+H+): 388.20, found: 388.17
ER-886568	$C_{24}H_{25}N_3O_2$	387.5	0.0540	>20	5-((2R,6R)-2-((S)-1-hydroxy-3-phenylpropyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.27 (d, 4 H) 1.70 - 1.99 (m, 2 H) 2.46 (d, *J*=5.34 Hz, 1 H) 2.63 (dd, *J*=11.86, 10.15 Hz, 1 H) 2.75 (ddd, *J*=13.62, 9.24, 7.05 Hz, 1 H) 2.82 - 3.00 (m, 2 H) 3.26 (ddt, *J*=18.08, 11.72, 2.08, 2.08 Hz, 2 H) 3.51 - 3.65 (m, 1 H) 3.73 - 3.89 (m, 1 H) 4.05 (ddd, *J*=10.15, 6.20, 2.24 Hz, 1 H) 7.01 - 7.14 (m, 1 H) 7.15 - 7.34 (m, 5 H) 7.47 - 7.59 (m, 1 H) 8.04 (d, *J*=7.90 Hz, 1 H) 8.38 - 8.48 (m, 1 H) 9.03 - 9.14 (m, 1 H)	LCMS (ESI+) calcd for C24H25N3O2 (M+H+): 388.20, found: 388.16
ER-886601	$C_{22}H_{22}N_4O$	358.4	0.0115	>20	5-((2R,6S)-2-methyl-6-((phenylamino)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.24 (d, *J*=6.15 Hz, 5 H) 2.62 (s, 1 H) 2.65 (d, *J*=1.76 Hz, 1 H) 2.67 (s, 1 H) 2.72 (s, 1 H) 2.74 (s, 1 H) 2.77 (s, 1 H) 3.24 (d, *J*=5.27 Hz, 3 H) 3.34 (s, 1 H) 3.37 (s, 1 H) 3.46 (s, 1 H) 3.48 (s, 1 H) 4.12 (s, 1 H) 6.59 - 6.67 (m, 3 H) 7.09 (dd, *J*=8.79, 7.32 Hz, 2 H) 7.20 (d, *J*=8.20 Hz, 1 H) 7.53 - 7.57 (m, 1 H) 8.09 (s, 1 H) 8.11 (s, 1 H) 8.52 - 8.55 (m, 1 H) 8.92 (dd, *J*=4.39, 1.76 Hz, 1 H)	
ER-886602	$C_{23}H_{24}N_4O$	372.5	0.1850	>20	5-((2R,6S)-2-methyl-6-((m-tolylamino)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.32 (d, *J*=6.15 Hz, 4 H) 2.39 (s, 3 H) 2.66 - 2.80 (m, 2 H) 3.36 - 3.42 (m, 2 H) 3.49 - 3.56 (m, 2 H) 4.06 - 4.18 (m, 2 H) 7.19 - 7.27 (m, 4 H) 7.38 - 7.42 (m, 1 H) 7.56 - 7.60 (m, 1 H) 8.12 (d, *J*=8.20 Hz, 1 H) 8.55 - 8.58 (m, 1 H) 8.94 (dd, *J*=4.39, 1.76 Hz, 1 H)	

FIG. 6M

ER-886603	$C_{23}H_{24}N_4O$	372.5	0.0110	>20	5-((2R,6S)-2-methyl-6-((o-tolylamino)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.32 (d, J=5.57 Hz, 4 H) 2.39 (s, 3 H) 2.68 (d, J=12.01 Hz, 1 H) 2.74 (d, J=13.48 Hz, 1 H) 2.78 (s, 1 H) 2.81 (s, 1 H) 3.38 - 3.45 (m, 4 H) 3.53 (d, J=3.22 Hz, 1 H) 3.57 (d, J=3.52 Hz, 1 H) 4.09 (d, J=4.69 Hz, 1 H) 4.17 (s, 1 H) 4.85 (s, 9 H) 7.20 - 7.25 (m, 3 H) 7.28 - 7.33 (m, 2 H) 7.57 - 7.60 (m, 1 H) 8.12 (d, J=7.32 Hz, 1 H) 8.57 (d, J=8.50 Hz, 1 H) 8.94 (d, J=4.39 Hz, 1 H)	
ER-886604	$C_{23}H_{24}N_4O$	372.5	0.0860	>20	5-((2R,6S)-2-methyl-6-((p-tolylamino)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.33 (d, J=6.15 Hz, 4 H) 2.38 (s, 4 H) 2.66 - 2.80 (m, 3 H) 3.34 - 3.41 (m, 2 H) 3.47 - 3.57 (m, 3 H) 4.04 - 4.16 (m, 2 H) 7.23 (d, J=8.20 Hz, 1 H) 7.34 - 7.40 (m, 4 H) 7.56 - 7.60 (m, 1 H) 8.11 (d, J=8.20 Hz, 1 H) 8.56 (dd, J=8.50, 1.76 Hz, 1 H) 8.92 - 8.94 (m, 1 H)	
ER-886605	$C_{22}H_{19}F_2N_3O_2$	395.4	0.0220		5-((2R,6R)-2-((3,4-difluorophenoxy)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.23 (d, J=6.45 Hz, 4 H) 2.66 (dd, J=11.72, 10.25 Hz, 1 H) 2.88 (dd, J=11.72, 10.55 Hz, 1 H) 3.39 (s, 1 H) 3.36 (s, 1 H) 3.49 (s, 1 H) 3.46 (s, 1 H) 3.99 - 4.13 (m, 4 H) 4.25 - 4.31 (m, 1 H) 4.82 - 4.86 (m, 4 H) 6.68 - 6.74 (m, 1 H) 6.85 - 6.91 (m, 1 H) 7.08 - 7.16 (m, 1 H) 7.24 (d, J=8.20 Hz, 1 H) 7.59 - 7.63 (m, 1 H) 8.12 (d, J=7.91 Hz, 1 H) 8.61 - 8.65 (m, 1 H) 8.94 (dd, J=4.39, 1.76 Hz, 1 H)	
ER-886606	$C_{22}H_{20}FN_3O_2$	377.4	0.0030	>20	5-((2R,6R)-2-((3-fluorophenoxy)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 1.24 (3 H, d) 2.68 (1 H, t) 2.88 (1 H, t) 3.38 (1 H, d) 3.49 (1 H, d) 3.99 - 4.14 (3 H, m) 4.25 - 4.36 (1 H, m) 6.59 - 6.80 (3 H, m) 7.17 - 7.30 (2 H, m) 7.58 - 7.65 (1 H, m) 8.08 - 8.18 (1 H, m) 8.58 - 8.69 (1 H, m) 8.90 - 8.99 (1 H, m)	LCMS (ESI+) calcd for C22 H20 F N3 O2 (M+H+) 378.4, found 378.5
ER-886608	$C_{25}H_{26}N_6O$	426.5	0.0130	3.366	5-((2S,6R)-2-(((1,2-dimethyl-1H-benzo[d]imidazol-5-yl)amino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.24 (d, J=6.15 Hz, 4 H) 2.62 - 2.68 (m, 1 H) 2.72 (s, 3 H) 2.77 - 2.84 (m, 1 H) 3.29 - 3.39 (m, 4 H) 3.46 (d, J=12.01 Hz, 1 H) 3.86 (s, 3 H) 4.08 (d, J=6.74 Hz, 1 H) 4.16 (d, J=7.62 Hz, 1 H) 4.80 (s, 1 H) 6.78 (d, J=2.05 Hz, 1 H) 6.95 - 6.98 (m, 1 H) 7.22 (d, J=8.20 Hz, 1 H) 7.49 (d, J=8.79 Hz, 1 H) 7.55 - 7.58 (m, 1 H) 8.11 (d, J=7.91 Hz, 1 H) 8.56 - 8.59 (m, 1 H) 8.92 - 8.94 (m, 1 H)	

FIG. 6N

ER-886609	$C_{26}H_{28}N_6O$	440.6	0.0120	6.929	5-((2S,6R)-2-(((1-ethyl-2-methyl-1H-benzo[d]imidazol-5-yl)amino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile		
ER-886611	$C_{22}H_{28}N_4O$	364.5	0.1070	8.112	5-((2S,6R)-2-((cyclohexylamino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.26 - 1.28 (m, 3 H) 1.31 - 1.40 (m, 4 H) 1.70 (d, J=12.89 Hz, 1 H) 1.87 (d, J=8.20 Hz, 2 H) 2.11 (br. s., 2 H) 2.64 - 2.71 (m, 1 H) 2.73 - 2.77 (m, 1 H) 3.07 - 3.15 (m, 2 H) 3.22 (br. s., 1 H) 3.41 (s, 1 H) 3.38 (s, 1 H) 4.09 - 4.13 (m, 1 H) 4.22 (t, J=9.96 Hz, 1 H) 4.84 - 4.85 (m, 8 H) 7.24 (dd, J=7.91, 2.34 Hz, 1 H) 7.59 - 7.63 (m, 1 H) 8.12 - 8.15 (m, 1 H) 8.59 - 8.63 (m, 1 H) 8.95 - 8.97 (m, 1 H)	
ER-886624	$C_{22}H_{20}FN_3O_2$	377.4	0.0027	>20	5-((2R,6R)-2-((2-fluorophenoxy)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.24 (dd, J=6.15, 0.88 Hz, 5 H) 2.67 (d, J=10.84 Hz, 1 H) 2.87 - 2.90 (m, 1 H) 2.92 (s, 1 H) 3.37 (s, 1 H) 3.40 (s, 1 H) 3.53 (s, 1 H) 3.56 (s, 1 H) 4.06 - 4.10 (m, 1 H) 4.16 - 4.20 (m, 1 H) 4.83 - 4.85 (m, 17 H) 7.03 - 7.11 (m, 3 H) 7.24 (s, 1 H) 7.26 (s, 1 H) 7.60 - 7.63 (m, 1 H) 8.12 (d, J=0.88 Hz, 1 H) 8.14 (d, J=0.88 Hz, 1 H) 8.63 (s, 1 H) 8.65 (s, 1 H) 8.94 - 8.96 (m, 1 H)	
ER-886625	$C_{18}H_{19}N_3O_2$	309.4	0.1570	>20	5-((2R,6R)-2-methyl-6-propionylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-d) d ppm 1.02 - 1.16 (m, 3 H) 1.33 (d, J=6.20 Hz, 3 H) 2.58 - 2.86 (m, 5 H) 3.30 (dt, J=11.96, 2.14 Hz, 1 H) 3.62 (dt, J=12.02, 2.43 Hz, 1 H) 4.01 - 4.16 (m, 1 H) 4.37 (dd, J=10.58, 2.67 Hz, 1 H) 7.10 (d, J=8.12 Hz, 1 H) 7.53 (dd, J=8.65, 4.17 Hz, 1 H) 8.04 (d, J=7.90 Hz, 1 H) 8.46 (dd, J=8.65, 1.82 Hz, 1 H) 9.08 (dd, J=4.06, 1.71 Hz, 1 H)	LCMS (ESI+) calcd for C18H19N3O2 (M+H+): 310.15, found: 310.14
ER-886626	$C_{22}H_{25}N_3O_2$	363.5	0.0730	>20	5-((2R,6R)-2-(cyclohexanecarbonyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-d) d ppm 1.15 - 1.44 (m, 9 H) 1.71 (d, J=11.54 Hz, 1 H) 1.75 - 1.90 (m, 2 H) 1.90 - 2.03 (m, 1 H) 2.68 (dd, J=11.96, 10.25 Hz, 1 H) 2.79 (dd, J=12.18, 10.68 Hz, 1 H) 2.90 - 3.11 (m, 1 H) 3.31 (dt, J=11.91, 2.06 Hz, 1 H) 3.61 (dt, J=12.07, 2.30 Hz, 1 H) 4.44 (dd, J=10.58, 4.08 (ddd, J=10.15, 6.30, 2.14 Hz, 1 H) 2.67 Hz, 1 H) 7.11 (d, J=7.90 Hz, 1 H) 7.53 (dd, J=8.55, 4.27 Hz, 1 H) 8.06 (d, J=7.90 Hz, 1 H) 8.46 (dd, J=8.55, 1.71 Hz, 1 H) 9.09 (dd, J=4.27, 1.71 Hz, 1 H)	LCMS (ESI+) calcd for C22H25N3O2 (M+H+): 364.20, found: 365.32

FIG. 6O

ER-886629	$C_{24}H_{23}N_3O_2$	385.5	0.1930	>20	5-((2R,6R)-2-methyl-6-(3-phenylpropanoyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.32 (d, *J*=6.41 Hz, 3 H) 2.56 - 2.79 (m, 2 H) 2.88 - 2.98 (m, 2 H) 3.01 - 3.12 (m, 2 H) 3.29 (dt, *J*=11.96, 2.14 Hz, 1 H) 3.58 (dt, *J*=11.96, 2.35 Hz, 1 H) 3.97 - 4.15 (m, 1 H) 4.35 (dd, *J*=10.47, 2.78 Hz, 1 H) 7.07 (d, *J*=7.90 Hz, 1 H) 7.15 - 7.38 (m, 5 H) 7.53 (dd, *J*=8.55, 4.27 Hz, 1 H) 8.05 (d, *J*=7.90 Hz, 1 H) 8.44 (dd, *J*=8.65, 1.82 Hz, 1 H) 9.09 (dd, *J*=4.27, 1.71 Hz, 1 H)	LCMS (ESI+) calcd for C24H23N3O2 (M+H+): 386.18, found: 386.15
ER-886786	$C_{23}H_{23}N_3O_2$	373.5	0.0090	>2.0	5-((2R,6R)-2-methyl-6-((o-tolyloxy)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.29 (d, *J*=6.15 Hz, 4 H) 1.99 (s, 1 H) 2.03 - 2.13 (m, 2 H) 2.17 (s, 4 H) 2.72 (dd, *J*=11.72, 10.25 Hz, 1 H) 2.82 - 2.88 (m, 1 H) 3.30 - 3.34 (m, 1 H) 3.61 - 3.65 (m, 1 H) 3.93 - 3.98 (m, 1 H) 4.07 - 4.14 (m, 1 H) 4.17 - 4.21 (m, 1 H) 4.30 - 4.37 (m, 1 H) 6.80 - 6.88 (m, 2 H) 7.07 - 7.16 (m, 3 H) 7.24 (s, 1 H) 7.48 - 7.52 (m, 1 H) 8.04 (d, *J*=7.91 Hz, 1 H) 8.48 (dd, *J*=8.50, 1.76 Hz, 1 H) 9.07 (dd, *J*=4.39, 1.76 Hz, 1 H)
ER-886787	$C_{20}H_{20}N_6O$	360.4	0.0229	>2.0	5-((2R,6S)-2-methyl-6-((pyrimidin-2-ylamino)methyl)morpholino)quinoline-8-carbonitrile	
ER-886788	$C_{21}H_{21}N_5O$	359.4	0.0060	>2.0	5-((2R,6S)-2-methyl-6-((pyridin-2-ylamino)methyl)morpholino)quinoline-8-carbonitrile	
ER-886789	$C_{22}H_{23}N_5O$	373.5	0.0070	>2.0	5-((2R,6S)-2-methyl-6-(((6-methylpyridin-2-yl)amino)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-*d*$_4$) d ppm 1.15 (d, *J*=6.15 Hz, 7 H) 2.66 - 2.71 (m, 9 H) 2.94 (d, *J*=11.72 Hz, 1 H) 3.31 (s, 1 H) 4.84 - 4.85 (m, 61 H) 6.83 (d, *J*=6.74 Hz, 1 H) 6.96 (d, *J*=8.20 Hz, 1 H) 7.28 (s, 1 H) 7.30 (s, 1 H) 7.61 - 7.65 (m, 2 H) 7.73 (d, *J*=8.79 Hz, 1 H) 8.15 (s, 1 H) 8.17 (s, 1 H) 8.65 (s, 1 H) 8.67 (s, 1 H) 8.97 (d, *J*=2.64 Hz, 1 H)

FIG. 6P

ER-886790	$C_{22}H_{23}N_5O$	373.5	0.0085	>2.0	5-((2R,6S)-2-methyl-6-(((5-methylpyridin-2-yl)amino)methyl)morpholino)quinoline-8-carbonitrile		
ER-886814	$C_{21}H_{25}N_4O_2$	366.5	0.0720	>2.0	5-((2S,6R)-2-(((R)-2-(hydroxymethyl)pyrrolidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile		
ER-886815	$C_{22}H_{28}N_4O$	364.5	0.3950	>2.0	5-((2R,6R)-2-((2,2-dimethylpyrrolidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile		
ER-886816	$C_{23}H_{30}N_4O$	378.5	0.1970	>2.0	5-((2S,6R)-2-((2-isopropylpyrrolidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.02 - 1.17 (m, 7 H) 1.28 - 1.34 (m, 4 H) 1.86 - 1.96 (m, 1 H) 2.04 - 2.28 (m, 4 H) 2.68 - 2.80 (m, 2 H) 3.26 - 3.51 (m, 8 H) 3.52 - 3.60 (m, 1 H) 3.73 - 3.81 (m, 1 H) 4.11 - 4.21 (m, 1 H) 4.35 - 4.44 (m, 1 H) 4.85 - 4.91 (m, 8 H) 7.23 - 7.28 (m, 1 H) 7.65 (dd, J=8.50, 4.10 Hz, 1 H) 8.15 (d, J=7.62 Hz, 1 H) 8.64 - 8.69 (m, 1 H) 8.98 (dd, J=4.10, 1.46 Hz, 1 H)
ER-886817	$C_{21}H_{26}N_4O$	350.5	0.0600	>2.0	5-((2R,6S)-2-methyl-6-(((S)-2-methylpyrrolidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.26 - 1.34 (m, 4 H) 1.48 (d, J=6.74 Hz, 3 H) 1.71 - 1.77 (m, 1 H) 1.98 - 2.14 (m, 3 H) 2.29 - 2.38 (m, 2 H) 2.67 - 2.81 (m, 4 H) 3.19 - 3.26 (m, 1 H) 3.33 (s, 1 H) 3.38 - 3.46 (m, 4 H) 3.52 (dd, J=13.48, 2.34 Hz, 1 H) 3.61 - 3.68 (m, 1 H) 3.81 - 3.88 (m, 1 H) 4.11 - 4.17 (m, 1 H) 4.32 - 4.39 (m, 1 H) 7.26 (d, J=7.91 Hz, 1 H) 7.61 - 7.65 (m, 1 H) 8.15 (d, J=7.91 Hz, 1 H) 8.63 - 8.67 (m, 1 H) 8.95 - 8.98 (m, 1 H)

FIG. 6Q

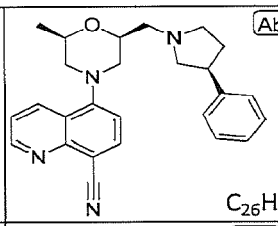
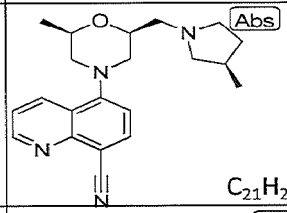
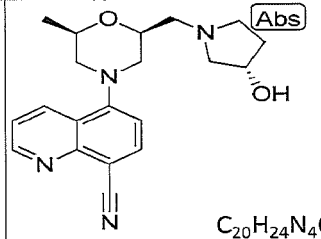
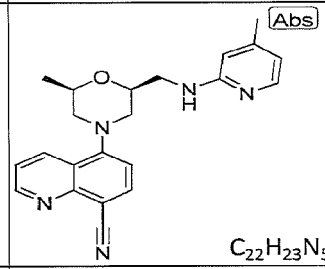
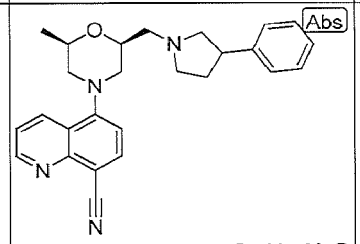
ER-886818	 $C_{26}H_{28}N_4O$	412.5	0.0800	>2.0	5-((2R,6S)-2-methyl-6-(((S)-3-phenylpyrrolidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.08 - 1.25 (m, 4 H) 1.30 (d, J=6.15 Hz, 4 H) 1.73 - 1.78 (m, 1 H) 2.66 - 2.82 (m, 3 H) 3.32 - 3.48 (m, 6 H) 4.02 - 4.24 (m, 1 H) 4.24 - 4.40 (m, 1 H) 7.26 (d, J=8.20 Hz, 1 H) 7.63 (dd, J=8.50, 4.39 Hz, 1 H) 8.06 - 8.23 (m, 1 H) 8.57 - 8.73 (m, 1 H) 8.97 (dd, J=4.39, 1.76 Hz, 1 H)	
ER-886819	 $C_{21}H_{26}N_4O$	350.5	0.0360	>2.0	5-((2R,6S)-2-methyl-6-(((R)-3-methylpyrrolidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile		
ER-886820	 $C_{20}H_{24}N_4O_2$	352.4	0.0626	>2.0	5-((2S,6R)-2-(((S)-3-hydroxypyrrolidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.28 (d, J=6.15 Hz, 4 H) 1.96 - 2.07 (m, 1 H) 2.12 (d, J=4.39 Hz, 1 H) 2.32 (t, J=8.20 Hz, 1 H) 2.64 - 2.79 (m, 4 H) 3.20 (d, J=12.31 Hz, 1 H) 3.29 - 3.54 (m, 7 H) 3.58 (d, J=11.72 Hz, 1 H) 3.75 - 3.89 (m, 2 H) 4.09 - 4.17 (m, 1 H) 4.35 (br. s., 1 H) 4.55 (d, J=15.23 Hz, 1 H) 4.81 - 4.87 (m, 7 H) 7.22 (d, J=8.20 Hz, 1 H) 7.57 - 7.62 (m, 1 H) 8.11 (d, J=7.91 Hz, 1 H) 8.61 (d, J=8.50 Hz, 1 H) 8.91 - 8.95 (m, 1 H)	
ER-886853	 $C_{22}H_{23}N_5O$	373.5	0.0040	>2	5-((2R,6S)-2-methyl-6-(((4-methylpyridin-2-yl)amino)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.13 - 1.21 (m, 3 H) 2.34 - 2.39 (m, 3 H) 2.67 (dd, J=12.01, 10.25 Hz, 1 H) 2.76 - 2.83 (m, 1 H) 3.36 (d, J=12.01 Hz, 1 H) 3.53 (d, J=11.72 Hz, 1 H) 3.99 (ddd, J=10.25, 6.15, 2.34 Hz, 1 H) 4.21 - 4.37 (m, 3 H) 4.82 - 4.86 (m, 5 H) 6.76 (dd, J=7.03, 1.76 Hz, 1 H) 6.86 (s, 1 H) 7.22 - 7.27 (m, 1 H) 7.58 - 7.63 (m, 1 H) 7.79 (d, J=7.03 Hz, 1 H) 8.10 - 8.14 (m, 1 H) 8.60 - 8.65 (m, 1 H) 8.92 - 8.96 (m, 1 H)	
ER-886854	 $C_{26}H_{28}N_4O$	412.5	0.0190	>2	5-((2R,6S)-2-methyl-6-((3-phenylpyrrolidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.25 - 1.31 (m, 4 H) 2.50 - 2.53 (m, 1 H) 2.65 - 2.78 (m, 2 H) 3.24 (br. s., 1 H) 3.29 - 3.32 (m, 1 H) 3.41 (s, 1 H) 3.38 (s, 1 H) 3.44 - 3.54 (m, 3 H) 3.54 - 3.64 (m, 1 H) 3.73 (br. s., 1 H) 3.82 - 3.96 (m, 1 H) 3.99 - 4.09 (m, 1 H) 4.15 (br. s., 1 H) 4.37 (br. s., 1 H) 4.81 - 4.85 (m, 5 H) 7.22 - 7.31 (m, 2 H) 7.31 - 7.37 (m, 4 H) 7.61 (d, J=4.10 Hz, 1 H) 8.13 (d, J=7.91 Hz, 1 H) 8.60 - 8.65 (m, 1 H) 8.95 (br. s., 1 H)	

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FIG. 6R

ER-886855	$C_{22}H_{23}N_5O_2$	389.5	0.0260	>2	5-((2S,6R)-2-(((6-methoxypyridin-3-yl)amino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.21 - 1.26 (m, 3 H) 2.60 - 2.67 (m, 1 H) 2.76 - 2.83 (m, 1 H) 3.29 - 3.43 (m, 5 H) 3.99 - 4.17 (m, 5 H) 4.83 - 4.87 (m, 5 H) 7.18 - 7.23 (m, 2 H) 7.59 (dd, J=8.50, 4.39 Hz, 1 H) 7.68 (d, J=2.64 Hz, 1 H) 7.76 - 7.81 (m, 1 H) 8.08 - 8.12 (m, 1 H) 8.56 - 8.61 (m, 1 H) 8.86 - 8.99 (m, 1 H)
ER-886856	$C_{21}H_{26}N_4O$	350.5	0.0760	>2	5-((2R,6S)-2-methyl-6-(((R)-2-methylpyrrolidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.19 - 1.37 (m, 4 H) 1.37 - 1.53 (m, 3 H) 1.67 - 1.85 (m, 1 H) 2.01 - 2.20 (m, 2 H) 2.20 - 2.39 (m, 1 H) 2.58 - 2.86 (m, 3 H) 3.14 (d, J=12.89 Hz, 1 H) 3.33 - 3.59 (m, 5 H) 3.69 - 3.90 (m, 1 H) 4.04 - 4.22 (m, 1 H) 4.34 (t, J=10.25 Hz, 1 H) 7.14 - 7.30 (m, 1 H) 7.61 (ddd, J=8.50, 4.39, 0.88 Hz, 1 H) 8.12 (dd, J=8.20, 0.88 Hz, 1 H) 8.63 (dd, J=8.50, 1.46 Hz, 1 H) 8.86 - 9.07 (m, 1 H)
ER-886857	$C_{22}H_{28}N_4O$	364.5	0.1030	>2	5-((2S,6R)-2-((2,5-dimethylpyrrolidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.21 - 1.30 (m, 4 H) 1.34 - 1.37 (m, 1 H) 1.46 - 1.51 (m, 5 H) 1.73 - 1.86 (m, 2 H) 2.23 - 2.32 (m, 2 H) 2.60 - 2.79 (m, 2 H) 3.24 - 3.45 (m, 6 H) 3.54 - 3.66 (m, 1 H) 3.69 - 3.84 (m, 2 H) 4.04 - 4.17 (m, 1 H) 4.33 - 4.41 (m, 1 H) 4.86 (s, 4 H) 7.19 - 7.25 (m, 1 H) 7.58 - 7.63 (m, 1 H) 8.09 - 8.13 (m, 1 H) 8.60 - 8.65 (m, 1 H) 8.92 - 8.96 (m, 1 H)
ER-886858	$C_{22}H_{23}N_5O_2$	389.5	0.0080	>2	5-((2S,6R)-2-(((4-methoxypyridin-2-yl)amino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.15 - 1.22 (m, 3 H) 2.65 (d, J=10.55 Hz, 1 H) 2.69 (s, 1 H) 2.75 - 2.82 (m, 1 H) 3.37 (s, 1 H) 3.34 (s, 1 H) 3.52 (d, J=11.43 Hz, 1 H) 3.92 - 4.02 (m, 4 H) 4.16 - 4.23 (m, 1 H) 4.26 - 4.34 (m, 2 H) 6.42 (d, J=2.64 Hz, 1 H) 6.53 - 6.56 (m, 1 H) 7.23 - 7.27 (m, 1 H) 7.59 - 7.70 (m, 1 H) 7.79 (d, J=7.62 Hz, 1 H) 8.11 8.15 (m, 1 H) 8.61 - 8.65 (m, 1 H) 8.94 - 8.97 (m, 1 H)
ER-886859	$C_{22}H_{23}N_5O_2$	389.5	0.0810	>2	5-((2S,6R)-2-(((6-methoxypyridin-2-yl)amino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.21 - 1.25 (m, 3 H) 2.66 (dd, J=12.01, 10.25 Hz, 1 H) 2.76 - 2.82 (m, 1 H) 3.34 - 3.51 (m, 3 H) 3.56 (d, J=3.81 Hz, 1 H) 3.59 (d, J=3.81 Hz, 1 H) 3.96 - 3.98 (m, 3 H) 4.07 - 4.12 (m, 1 H) 4.18 (dd, J=6.74, 4.39 Hz, 1 H) 4.83 - 4.85 (m, 7 H) 6.27 (d, J=7.91 Hz, 1 H) 6.52 (d, J=8.50 Hz, 1 H) 7.23 (d, J=7.91 Hz, 1 H) 7.58 - 7.62 (m, 1 H) 7.74 - 7.79 (m, 1 H) 8.12 (d, J=7.91 Hz, 1 H) 8.61 (dd, J=8.50, 1.76 Hz, 1 H) 8.95 (dd, J=4.10, 1.76 Hz, 1 H)

FIG. 6S

ER-886860	$C_{25}H_{24}N_6O$	424.5	0.3280	>2	5-((2R,6S)-2-methyl-6-(((1-phenyl-1H-pyrazol-5-yl)amino)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.23 (d, J=6.45 Hz, 3 H) 2.52 - 2.59 (m, 1 H) 3.13 (s, 1 H) 3.16 (s, 1 H) 3.32 - 3.35 (m, 1 H) 3.98 - 4.08 (m, 3 H) 4.85 - 4.87 (m, 12 H) 6.02 (d, J=3.52 Hz, 1 H) 7.17 (d, J=7.91 Hz, 1 H) 7.58 - 7.63 (m, 2 H) 7.72 - 7.76 (m, 2 H) 8.11 (d, J=7.91 Hz, 1 H) 8.19 (d, J=3.52 Hz, 1 H) 8.50 (dd, J=8.50, 1.76 Hz, 1 H) 8.97 (dd, J=4.39, 1.76 Hz, 1 H)
ER-886866	$C_{21}H_{26}N_4O_2$	366.5	0.1160	>2	5-((2S,6R)-2-(((S)-2-(hydroxymethyl)pyrrolidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.25 - 1.29 (m, 3 H) 1.85 - 1.94 (m, 1 H) 2.00 - 2.26 (m, 3 H) 2.64 - 2.77 (m, 2 H) 3.26 - 3.40 (m, 14 H) 3.59 - 3.71 (m, 2 H) 3.74 - 3.83 (m, 2 H) 3.87 - 3.92 (m, 1 H) 4.09 - 4.17 (m, 1 H) 4.32 - 4.39 (m, 1 H) 4.82 (s, 1 H) 4.87 (d, J=0.88 Hz, 11 H) 7.20 - 7.24 (m, 1 H) 7.58 - 7.62 (m, 1 H) 8.08 - 8.12 (m, 1 H) 8.60 - 8.64 (m, 1 H) 8.92 - 8.95 (m, 1 H)
ER-886867	$C_{20}H_{24}N_4O_2$	352.4	0.0870	>2	5-((2S,6R)-2-(((R)-3-hydroxypyrrolidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	
ER-886868	$C_{21}H_{26}N_4O$	350.5	0.0370	>2	5-((2R,6S)-2-methyl-6-(((S)-3-methylpyrrolidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.12 - 1.21 (m, 3 H) 1.28 (d, J=6.15 Hz, 3 H) 2.65 - 2.76 (m, 2 H) 3.30 - 3.49 (m, 5 H) 3.75 - 3.81 (m, 1 H) 4.10 - 4.16 (m, 1 H) 4.82 - 4.85 (m, 5 H) 7.24 (d, J=7.91 Hz, 1 H) 7.61 (dd, J=8.50, 4.39 Hz, 1 H) 8.13 (d, J=8.20 Hz, 1 H) 8.62 (d, J=8.50 Hz, 1 H) 8.94 - 8.97 (m, 1 H)
ER-886869	$C_{22}H_{28}N_4O$	364.5	0.0310	>2	5-((2S,6R)-2-((3,3-dimethylpyrrolidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.19 - 1.29 (m, 9 H) 1.86 - 1.93 (m, 1 H) 1.95 - 1.99 (m, 1 H) 2.65 - 2.74 (m, 2 H) 2.96 - 3.05 (m, 1 H) 3.08 (s, 1 H) 3.30 - 3.52 (m, 7 H) 3.75 - 3.81 (m, 1 H) 4.10 - 4.15 (m, 1 H) 4.32 (d, J=8.20 Hz, 1 H) 4.83 - 4.85 (m, 5 H) 7.24 (d, J=8.20 Hz, 1 H) 7.59 - 7.63 (m, 1 H) 8.11 - 8.14 (m, 1 H) 8.62 (dd, J=8.50, 1.76 Hz, 1 H) 8.94 - 8.96 (m, 1 H)

FIG. 6T

ER-886912	$C_{28}H_{32}N_4O$	440.6	0.6480	5-((2R,6R)-2-methyl-6-((R)-3-phenyl-1-(pyrrolidin-1-yl)propyl)morpholino)quinoline-8-carbonitrile		
ER-886913	$C_{28}H_{32}N_4O$	440.6	1.8930	5-((2R,6R)-2-methyl-6-((S)-3-phenyl-1-(pyrrolidin-1-yl)propyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-d) d ppm 1.21 - 1.32 (m, 5 H) 1.72 (d, J=5.77 Hz, 4 H) 1.85 - 1.98 (m, 2 H) 2.59 - 2.83 (m, 6 H) 3.28 (d, J=12.18 Hz, 1 H) 3.46 - 3.55 (m, 1 H) 3.98 (br. s., 2 H) 7.07 (t, J=7.16 Hz, 1 H) 7.14 - 7.34 (m, 5 H) 7.49 (dt, J=8.92, 4.62 Hz, 1 H) 8.04 (d, J=8.12 Hz, 1 H) 8.45 (d, J=8.55 Hz, 1 H) 9.03 - 9.11 (m, 1 H)	LCMS (ESI+) calcd for C28H32N4O (M+H+): 441.26, found: 441.33
ER-886948	$C_{22}H_{23}N_5O_2$	389.5	0.0030	5-((2S,6R)-2-(((3-methoxypyridin-2-yl)amino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.16 (d, J=6.15 Hz, 4 H) 2.67 (dd, J=12.01, 10.25 Hz, 1 H) 2.78 - 2.85 (m, 1 H) 3.36 (d, J=12.01 Hz, 1 H) 3.54 (d, J=11.43 Hz, 1 H) 3.96 - 4.03 (m, 5 H) 4.34 - 4.43 (m, 3 H) 4.82 - 4.86 (m, 7 H) 6.82 - 6.86 (m, 1 H) 7.26 (d, J=8.20 Hz, 1 H) 7.36 (d, J=7.62 Hz, 1 H) 7.52 - 7.55 (m, 1 H) 7.62 (dd, J=8.50, 4.10 Hz, 1 H) 8.14 (d, J=8.20 Hz, 1 H) 8.64 (dd, J=8.50, 1.76 Hz, 1 H) 8.94 - 8.97 (m, 1 H)	
ER-886949	$C_{21}H_{26}N_4O_2$	366.5	0.1450	5-((2S,6R)-2-(((R)-3-hydroxypiperidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.23 - 1.29 (m, 4 H) 1.69 (br. s., 1 H) 1.72 - 1.87 (m, 2 H) 2.63 - 2.76 (m, 2 H) 3.13 (br. s., 1 H) 3.16 - 3.26 (m, 3 H) 3.30 - 3.45 (m, 4 H) 3.70 (d, J=12.31 Hz, 1 H) 4.16 (br. s., 1 H) 4.40 (d, J=9.96 Hz, 1 H) 4.81 - 4.85 (m, 7 H) 7.24 (d, J=7.62 Hz, 1 H) 7.59 - 7.63 (m, 1 H) 8.13 (d, J=7.91 Hz, 1 H) 8.59 - 8.64 (m, 1 H) 8.96 (d, J=4.39 Hz, 1 H)	
ER-886950	$C_{23}H_{30}N_4O$	378.5	0.7360	5-((2S,6R)-2-(((2R,6S)-2,6-dimethylpiperidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.23 - 1.28 (m, 3 H) 1.34 - 1.36 (m, 2 H) 1.38 - 1.42 (m, 3 H) 1.47 (d, J=5.57 Hz, 1 H) 1.61 - 1.68 (m, 1 H) 1.80 (s, 1 H) 2.62 - 2.71 (m, 1 H) 2.74 (s, 1 H) 2.76 - 2.82 (m, 1 H) 3.05 - 3.11 (m, 1 H) 3.34 (d, J=14.65 Hz, 1 H) 3.42 (s, 1 H) 3.38 (s, 1 H) 3.46 - 3.56 (m, 1 H) 4.11 (d, J=9.67 Hz, 1 H) 4.84 (d, J=1.17 Hz, 12 H) 7.25 (d, J=7.91 Hz, 1 H) 7.62 (dd, J=8.79, 4.39 Hz, 1 H) 8.14 (d, J=7.91 Hz, 1 H) 8.60 - 8.64 (m, 1 H) 8.95 - 8.97 (m, 1 H)	

FIG. 6U

ER-886951		$C_{21}H_{26}N_4O_2$	366.5	0.6320		5-((2S,6R)-2-(((S)-3-hydroxypiperidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.28 (d, J=6.45 Hz, 11 H) 3.22 (s, 7 H) 3.38 (s, 1 H) 4.81 - 4.85 (m, 115 H) 7.25 (d, J=8.20 Hz, 2 H) 7.62 (dd, J=8.50, 4.10 Hz, 2 H) 8.14 (d, J=8.20 Hz, 2 H) 8.63 (d, J=7.03 Hz, 1 H) 8.95 (s, 1 H)
ER-886953		$C_{21}H_{26}N_4O_2$	366.5	0.0930		5-((2S,6R)-2-((4-hydroxypiperidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.27 (d, J=6.15 Hz, 3 H) 1.70 - 1.84 (m, 1 H) 1.86 - 2.14 (m, 2 H) 2.63 - 2.75 (m, 2 H) 3.07 - 3.16 (m, 1 H) 3.20 - 3.26 (m, 1 H) 3.29 - 3.40 (m, 5 H) 3.44 - 3.51 (m, 1 H) 3.67 (d, J=7.91 Hz, 1 H) 3.80 - 3.86 (m, 1 H) 4.05 - 4.17 (m, 2 H) 4.37 - 4.47 (m, 1 H) 4.86 (s, 1 H) 4.89 - 4.92 (m, 4 H) 7.21 (d, J=7.91 Hz, 1 H) 7.56 - 7.61 (m, 1 H) 8.09 (d, J=7.91 Hz, 1 H) 8.60 (d, J=8.50 Hz, 1 H) 8.93 (d, J=4.10 Hz, 1 H)
ER-886955		$C_{22}H_{28}N_4O_2$	380.5	0.1840		5-((2S,6R)-2-((2-(hydroxymethyl)piperidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.22 - 1.29 (m, 4 H) 1.58 - 1.72 (m, 2 H) 1.75 - 1.95 (m, 5 H) 2.63 - 2.79 (m, 2 H) 3.20 - 3.25 (m, 1 H) 3.29 - 3.42 (m, 4 H) 3.46 - 3.59 (m, 1 H) 3.61 - 3.74 (m, 2 H) 3.89 - 3.93 (m, 1 H) 4.08 - 4.16 (m, 1 H) 4.43 - 4.49 (m, 1 H) 4.82 - 4.85 (m, 6 H) 7.22 - 7.26 (m, 1 H) 7.59 - 7.63 (m, 1 H) 8.12 (d, J=7.91 Hz, 1 H) 8.60 - 8.64 (m, 1 H) 8.95 (d, J=4.39 Hz, 1 H)
ER-886957		$C_{22}H_{28}N_4O$	364.5	0.0500	> 2.0	5-((2R,6S)-2-methyl-6-((2-methylpiperidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.24 - 1.35 (m, 5 H) 1.39 - 1.45 (m, 2 H) 1.60 - 1.65 (m, 1 H) 1.82 (d, J=13.48 Hz, 1 H) 1.93 (br. s., 1 H) 2.63 - 2.79 (m, 2 H) 3.13 - 3.26 (m, 2 H) 3.29 - 3.51 (m, 5 H) 3.76 (d, J=12.89 Hz, 1 H) 4.11 - 4.16 (m, 1 H) 4.30 - 4.42 (m, 1 H) 4.85 (s, 5 H) 7.25 (d, J=7.91 Hz, 1 H) 7.62 (dd, J=8.50, 4.10 Hz, 1 H) 8.13 (d, J=7.91 Hz, 1 H) 8.61 - 8.66 (m, 1 H) 8.96 (dd, J=4.39, 1.76 Hz, 1 H)
ER-886958		$C_{23}H_{30}N_4O$	378.5	0.0840	> 2.0	5-((2S,6R)-2-((2-ethylpiperidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 0.98 - 1.04 (m, 3 H) 1.24 - 1.29 (m, 3 H) 1.57 - 1.69 (m, 1 H) 1.73 - 1.96 (m, 3 H) 2.64 - 2.79 (m, 2 H) 3.08 - 3.26 (m, 2 H) 3.29 - 3.49 (m, 3 H) 3.52 - 3.55 (m, 1 H) 3.74 (d, J=13.18 Hz, 1 H) 4.10 - 4.17 (m, 1 H) 4.41 (s, 1 H) 4.85 - 4.88 (m, 4 H) 7.24 (d, J=7.91 Hz, 1 H) 7.61 (dd, J=8.50, 4.39 Hz, 1 H) 8.12 (d, J=8.20 Hz, 1 H) 8.60 - 8.66 (m, 1 H) 8.94 - 8.97 (m, 1 H)

FIG. 6V

ER-887137	$C_{22}H_{29}N_5O$	379.5	0.0157	> 10 < 20.9	5-((2S,6R)-2-((2,3-dimethylpiperazin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.22 - 1.41 (m, 11 H) 2.63 - 2.76 (m, 2 H) 3.05 - 3.11 (m, 1 H) 3.33 - 3.46 (m, 4 H) 3.52 (s, 1 H) 3.72 - 3.77 (m, 1 H) 4.07 - 4.12 (m, 1 H) 7.21 - 7.25 (m, 1 H) 7.59 - 7.63 (m, 1 H) 8.11 - 8.14 (m, 1 H) 8.59 - 8.64 (m, 1 H) 8.95 (dd, J=4.39, 1.76 Hz, 1 H)	
ER-887138	$C_{21}H_{21}N_5O$	359.4	0.0440	> 2.0	5-((2R,6S)-2-methyl-6-((pyridin-3-ylamino)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.18 - 1.23 (m, 3 H) 2.63 - 2.69 (m, 1 H) 2.71 - 2.82 (m, 1 H) 3.36 (d, J=10.84 Hz, 1 H) 3.53 (d, J=10.84 Hz, 1 H) 3.97 - 4.05 (m, 1 H) 4.33 - 4.40 (m, 1 H) 4.43 - 4.49 (m, 1 H) 4.68 (d, J=13.48 Hz, 1 H) 4.86 (d, J=1.17 Hz, 4 H) 7.25 (dd, J=8.20, 1.17 Hz, 1 H) 7.60 - 7.68 (m, 3 H) 8.02 - 8.05 (m, 1 H) 8.07 - 8.15 (m, 2 H) 8.61 - 8.66 (m, 1 H) 8.96 (dt, J=4.10, 1.46 Hz, 1 H)	
ER-887139	$C_{21}H_{21}N_5O$	359.4	0.0080	> 2.0	5-((2R,6S)-2-methyl-6-((pyridin-4-ylamino)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.19 (d, J=6.15 Hz, 3 H) 2.60 - 2.72 (m, 2 H) 3.35 (d, J=12.01 Hz, 1 H) 3.47 (d, J=11.43 Hz, 1 H) 3.96 - 4.03 (m, 1 H) 4.14 - 4.20 (m, 1 H) 4.22 - 4.28 (m, 1 H) 4.34 (d, J=2.05 Hz, 1 H) 4.38 (s, 1 H) 4.85 - 4.87 (m, 5 H) 6.80 - 6.83 (m, 2 H) 7.24 (d, J=8.20 Hz, 1 H) 7.59 - 7.63 (m, 1 H) 8.05 - 8.09 (m, 2 H) 8.12 (d, J=7.91 Hz, 1 H) 8.61 - 8.65 (m, 1 H) 8.95 - 8.97 (m, 1 H)	
ER-887140	$C_{21}H_{23}F_3N_4O$	404.4	0.3086	> 2.0	5-((2R,6S)-2-methyl-6-(((S)-2-(trifluoromethyl)pyrrolidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.20 - 1.25 (m, 4 H) 2.64 (d, J=9.96 Hz, 1 H) 2.75 (d, J=10.55 Hz, 1 H) 2.79 (s, 1 H) 3.09 (s, 1 H) 3.15 - 3.19 (m, 1 H) 3.30 - 3.40 (m, 4 H) 4.08 (d, J=7.03 Hz, 1 H) 4.80 - 4.86 (m, 9 H) 7.22 (d, J=7.91 Hz, 1 H) 7.61 (dd, J=8.50, 4.39 Hz, 1 H) 8.13 (d, J=8.20 Hz, 1 H) 8.62 (dd, J=8.50, 1.76 Hz, 1 H) 8.93 - 8.96 (m, 1 H)	
ER-887141	$C_{22}H_{28}N_4O$	364.5	0.0630	> 2.0	5-((2R,6S)-2-methyl-6-((4-methylpiperidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 0.99 (3 H, d) 1.27 (3 H, d) 1.40 - 1.60 (2 H, m) 1.63 - 1.76 (1 H, m) 1.83 - 2.03 (2 H, m) 2.60 - 2.77 (2 H, m) 2.96 - 3.09 (2 H, m) 3.23 - 3.26 (2 H, m) 3.32 - 3.46 (2 H, m) 3.60 - 3.72 (2 H, m) 4.08 - 4.24 (1 H, m) 4.33 - 4.49 (1 H, m) 7.19 - 7.26 (1 H, m) 7.56 - 7.66 (1 H, m) 8.08 - 8.17 (1 H, m) 8.56 - 8.66 (1 H, m) 8.90 - 8.99 (1 H, m)	LCMS (ESI+) calcd for C22 H28 N4 O (M+H+) 365.4, found 365.2

FIG. 6W

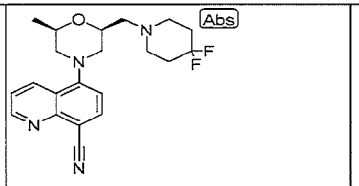
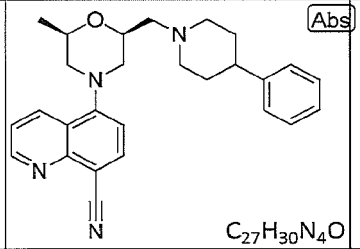
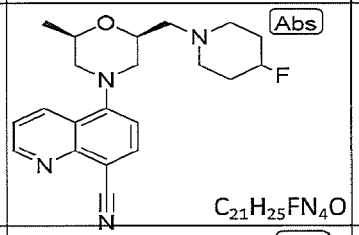
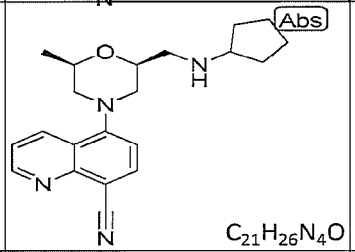
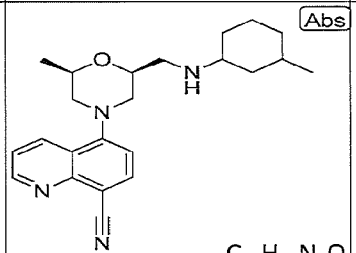
ER-887142	 $C_{21}H_{24}F_2N_4O$	386.4	0.1060	> 2.0	5-((2S,6R)-2-((4,4-difluoropiperidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.28 (d, J=5.57 Hz, 3 H) 1.33 (s, 1 H) 2.39 (br. s., 3 H) 2.45 (br. s., 1 H) 2.66 - 2.76 (m, 2 H) 3.33 - 3.43 (m, 4 H) 4.11 - 4.19 (m, 1 H) 4.41 - 4.48 (m, 1 H) 7.22 (d, J=7.91 Hz, 1 H) 7.58 - 7.62 (m, 1 H) 8.09 - 8.13 (m, 1 H) 8.61 (d, J=8.79 Hz, 1 H) 8.93 - 8.95 (m, 1 H)	
ER-887143	 $C_{27}H_{30}N_4O$	426.6	0.0430	> 2.0	5-((2R,6S)-2-methyl-6-((4-phenylpiperidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 1.29 (3 H, d) 1.97 - 2.20 (4 H, m) 2.63 - 2.80 (2 H, m) 2.83 - 2.96 (1 H, m) 3.14 - 3.26 (2 H, m) 3.34 - 3.56 (4 H, m) 3.72 - 3.86 (2 H, m) 4.08 - 4.22 (1 H, m) 4.38 - 4.56 (1 H, m) 7.14 - 7.38 (6 H, m) 7.55 - 7.66 (1 H, m) 8.05 - 8.16 (1 H, m) 8.57 - 8.66 (1 H, m) 8.88 - 8.99 (1 H, m)	LCMS (ESI+) calcd forC27 H30 N4 O (M+H+) 427.5, found 427.6
ER-887144	 $C_{21}H_{25}FN_4O$	368.5	0.0760	> 2.0	5-((2S,6R)-2-((4-fluoropiperidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 1.28 (3 H, d) 1.95 - 2.39 (5 H, m) 2.62 - 2.83 (2 H, m) 3.27 - 3.39 (2 H, m) 3.51 - 3.77 (2 H, m) 4.05 - 4.21 (2 H, m) 4.35 - 4.55 (3 H, m) 4.99 - 5.08 (1 H, m) 7.23 (1 H, d) 7.55 - 7.67 (1 H, m) 8.06 - 8.17 (1 H, m) 8.62 (1 H, d) 8.87 - 8.98 (1 H, m)	LCMS (ESI+) calcd for C21 H25 F N4 O (M+H+) 369.4, found 369.2
ER-887145	 $C_{21}H_{26}N_4O$	350.5	0.0870	> 2.0	5-((2S,6R)-2-((cyclopentylamino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.28 (d, J=6.15 Hz, 4 H) 1.61 - 1.71 (m, 4 H) 1.81 (br. s., 2 H) 2.09 - 2.16 (m, 2 H) 2.65 - 2.77 (m, 2 H) 3.07 - 3.14 (m, 1 H) 3.22 - 3.26 (m, 1 H) 3.37 - 3.42 (m, 2 H) 3.58 (t, J=7.32 Hz, 1 H) 4.07 - 4.15 (m, 1 H) 4.20 - 4.27 (m, 1 H) 4.85 - 4.87 (m, 5 H) 7.24 (d, J=8.20 Hz, 1 H) 7.60 - 7.64 (m, 1 H) 8.13 (d, J=8.20 Hz, 1 H) 8.60 - 8.63 (m, 1 H) 8.94 - 8.97 (m, 1 H)	
ER-887146	 $C_{23}H_{30}N_4O$	378.5	0.0680	> 2.0	5-((2R,6S)-2-methyl-6-(((3-methylcyclohexyl)amino)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 0.86 - 1.10 (m, 5 H) 1.25 - 1.40 (m, 4 H) 1.47 - 1.54 (m, 1 H) 1.62 (s, 1 H) 1.67 - 1.76 (m, 1 H) 1.85 - 1.91 (m, 1 H) 2.09 (d, J=5.27 Hz, 2 H) 2.64 - 2.77 (m, 2 H) 3.09 - 3.17 (m, 2 H) 3.22 - 3.26 (m, 1 H) 3.37 - 3.43 (m, 2 H) 4.07 - 4.15 (m, 1 H) 4.20 - 4.27 (m, 1 H) 4.88 (br. s., 1 H) 7.23 (d, J=8.20 Hz, 1 H) 7.61 (dd, J=8.50, 4.39 Hz, 1 H) 8.12 (d, J=7.91 Hz, 1 H) 8.61 (dd, J=8.50, 1.76 Hz, 1 H) 8.95 (dd, J=4.39, 1.76 Hz, 1 H)	

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FIG. 6X

ER-887177	$C_{22}H_{23}N_5O$	373.5	0.0030	> 2.0	5-((2R,6S)-2-methyl-6-(((3-methylpyridin-2-yl)amino)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.12 - 1.16 (m, 3 H) 2.24 - 2.28 (m, 3 H) 2.61 - 2.68 (m, 1 H) 2.77 - 2.84 (m, 1 H) 3.24 - 3.26 (m, 1 H) 3.31 - 3.36 (m, 1 H) 3.55 (d, J=11.72 Hz, 1 H) 3.94 - 4.01 (m, 1 H) 4.30 - 4.47 (m, 3 H) 4.82 - 4.87 (m, 5 H) 6.80 - 6.85 (m, 1 H) 7.19 - 7.24 (m, 1 H) 7.56 - 7.61 (m, 1 H) 7.74 (d, J=7.32 Hz, 1 H) 7.83 (d, J=6.74 Hz, 1 H) 8.07 - 8.11 (m, 1 H) 8.57 - 8.62 (m, 1 H) 8.90 - 8.93 (m, 1 H)	
ER-887199	$C_{17}H_{19}N_3O_2$	297.4	0.1050	> 2.0	5-((2R,6R)-2-ethyl-6-(hydroxymethyl)morpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 0.99 (3 H, t) 1.43 - 1.68 (2 H, m) 2.60 - 2.73 (1 H, m) 2.74 - 2.89 (1 H, m) 3.31 - 3.46 (2 H, m) 3.76 - 3.88 (1 H, m) 4.21 - 4.29 (1 H, m) 4.48 (2 H, br. s.) 7.24 (1 H, s) 7.53 - 7.67 (1 H, m) 7.96 - 8.19 (1 H, m) 8.53 - 8.70 (1 H, m) 8.88 - 9.04 (1 H, m)	LCMS (ESI+) calcd for C17 H19 N3 O2 (M+H+) 298.3, found 298.4
ER-887252	$C_{27}H_{25}N_5O$	435.5	0.0066	> 2.0	5-((2R,6S)-2-methyl-6-(((4-phenylpyridin-2-yl)amino)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.16 - 1.22 (m, 4 H) 2.70 (dd, J=12.01, 10.25 Hz, 1 H) 2.79 - 2.88 (m, 1 H) 3.31 - 3.39 (m, 1 H) 3.57 (d, J=11.43 Hz, 1 H) 4.00 - 4.06 (m, 1 H) 4.29 - 4.44 (m, 3 H) 4.80 - 4.85 (m, 5 H) 7.20 - 7.33 (m, 3 H) 7.52 - 7.64 (m, 4 H) 7.74 - 7.79 (m, 2 H) 7.99 (d, J=7.03 Hz, 1 H) 8.11 - 8.15 (m, 1 H) 8.29 (br. s., 1 H) 8.62 - 8.67 (m, 1 H) 8.93 - 8.97 (m, 1 H)	
ER-887253	$C_{20}H_{25}N_5O$	351.5	0.0072		5-((2R,6S)-2-methyl-6-(piperazin-1-ylmethyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.25 (d, J=6.15 Hz, 4 H) 1.96 - 2.04 (m, 1 H) 2.27 - 2.34 (m, 1 H) 2.64 - 2.79 (m, 3 H) 3.25 (br. s., 1 H) 3.29 - 3.43 (m, 5 H) 3.48 (s, 1 H) 3.52 - 3.63 (m, 9 H) 4.07 - 4.14 (m, 1 H) 4.38 - 4.46 (m, 1 H) 7.16 - 7.24 (m, 1 H) 7.57 - 7.67 (m, 1 H) 8.08 - 8.13 (m, 1 H) 8.58 - 8.62 (m, 1 H) 8.94 (dd, J=4.39, 1.76 Hz, 1 H)	
ER-887258	$C_{26}H_{29}N_5O$	427.6	0.0852	> 2.0	5-((2R,6S)-2-methyl-6-((4-phenylpiperazin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.29 (d, J=6.15 Hz, 3 H) 2.67 - 2.79 (m, 2 H) 3.30 - 3.43 (m, 7 H) 4.13 - 4.19 (m, 1 H) 4.44 - 4.51 (m, 1 H) 4.82 - 4.86 (m, 5 H) 6.88 - 6.93 (m, 1 H) 6.98 - 7.03 (m, 2 H) 7.22 - 7.29 (m, 3 H) 7.59 - 7.64 (m, 1 H) 8.11 - 8.15 (m, 1 H) 8.61 - 8.65 (m, 1 H) 8.94 - 8.97 (m, 1 H)	

FIG. 6Y

ER-887259	$C_{21}H_{22}N_6O$	374.4	0.0019	> 2.0	5-((2S,6R)-2-(((6-aminopyridin-2-yl)amino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.20 - 1.24 (m, 4 H) 2.61 - 2.68 (m, 1 H) 2.77 - 2.84 (m, 1 H) 3.34 - 3.43 (m, 4 H) 3.47 - 3.52 (m, 1 H) 4.05 - 4.19 (m, 2 H) 4.84 - 4.87 (m, 6 H) 5.96 - 6.04 (m, 2 H) 7.22 (d, J=7.91 Hz, 1 H) 7.51 - 7.62 (m, 2 H) 8.11 (d, J=7.91 Hz, 1 H) 8.59 - 8.63 (m, 1 H) 8.92 - 8.95 (m, 1 H)	
ER-887260	$C_{22}H_{29}N_5O$	379.5	0.0901	> 2.0	5-((2S,6R)-2-((2,5-dimethylpiperazin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.28 (d, J=6.15 Hz, 4 H) 1.61 - 1.71 (m, 4 H) 1.81 (br. s., 2 H) 2.09 - 2.16 (m, 2 H) 2.65 - 2.77 (m, 2 H) 3.07 - 3.14 (m, 1 H) 3.22 - 3.26 (m, 1 H) 3.37 - 3.42 (m, 2 H) 3.58 (t, J=7.32 Hz, 1 H) 4.07 - 4.15 (m, 1 H) 4.20 - 4.27 (m, 1 H) 4.85 - 4.87 (m, 5 H) 7.24 (d, J=8.20 Hz, 1 H) 7.60 - 7.64 (m, 1 H) 8.13 (d, J=8.20 Hz, 1 H) 8.60 - 8.63 (m, 1 H) 8.94 - 8.97 (m, 1 H)	
ER-887261	$C_{22}H_{27}N_5O_2$	393.5	0.0917	> 2.0	5-((2S,6R)-2-((4-acetylpiperazin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile		
ER-887262	$C_{21}H_{26}N_4O_3$	382.5	0.2720	> 2.0	5-((2S,6R)-2-(((2S,4R)-4-hydroxy-2-(hydroxymethyl)pyrrolidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.25 - 1.34 (m, 3 H) 1.98 - 2.05 (m, 1 H) 2.07 - 2.16 (m, 2 H) 2.30 - 2.34 (m, 1 H) 2.66 - 2.79 (m, 3 H) 3.31 (s, 1 H) 3.36 - 3.44 (m, 5 H) 3.64 - 3.68 (m, 1 H) 3.70 (s, 1 H) 3.74 - 3.84 (m, 2 H) 3.95 (d, J=3.81 Hz, 1 H) 3.97 - 4.02 (m, 1 H) 4.11 - 4.15 (m, 1 H) 4.34 - 4.40 (m, 1 H) 4.53 (br. s., 1 H) 7.25 (d, J=7.91 Hz, 1 H) 7.62 (dd, J=8.50, 4.39 Hz, 1 H) 8.13 (d, J=7.91 Hz, 1 H) 8.63 - 8.66 (m, 1 H) 8.96 (dd, J=4.10, 1.76 Hz, 1 H)	
ER-887268	$C_{21}H_{27}N_5O$	365.5	0.0360	> 2.0	5-((2R,6S)-2-methyl-6-(((R)-2-methylpiperazin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.23 - 1.27 (m, 3 H) 1.34 - 1.44 (m, 4 H) 1.98 - 2.04 (m, 1 H) 2.30 - 2.34 (m, 1 H) 2.64 - 2.71 (m, 1 H) 2.74 - 2.80 (m, 2 H) 3.10 - 3.25 (m, 2 H) 3.36 - 3.51 (m, 6 H) 3.55 - 3.63 (m, 3 H) 3.81 - 3.86 (m, 1 H) 4.08 - 4.14 (m, 1 H) 4.35 - 4.41 (m, 1 H) 7.22 - 7.25 (m, 1 H) 7.61 (dd, J=8.50, 4.39 Hz, 1 H) 8.13 (d, J=7.91 Hz, 1 H) 8.61 - 8.64 (m, 1 H) 8.95 (dd, J=4.10, 1.76 Hz, 1 H)	

FIG. 6Z

ER-887269	$C_{21}H_{27}N_5O$	365.5	0.0195	> 2.0	5-((2R,6S)-2-methyl-6-(((R)-3-methylpiperazin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 1.23 (3 H, d) 1.35 (3 H, d) 2.58 - 2.76 (2 H, m) 2.77 - 2.93 (1 H, m) 3.12 (3 H, d) 3.38 (3 H, br. s.) 3.50 - 3.71 (4 H, m) 4.02 - 4.15 (1 H, m) 4.28 - 4.40 (1 H, m) 7.17 - 7.29 (1 H, m) 7.55 - 7.66 (1 H, m) 8.08 - 8.17 (1 H, m) 8.55 - 8.68 (1 H, m) 8.89 - 8.99 (1 H, m)	LCMS (ESI+) calcd for C21 H27 N5 O (M+H+) 366.4, found 366.5
ER-887270	$C_{21}H_{27}N_5O$	365.5	0.0120	> 2.0	5-((2R,6S)-2-methyl-6-(((S)-3-methylpiperazin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 1.25 (3 H, d) 1.38 (3 H, d) 2.60 - 2.79 (2 H, m) 3.00 - 3.14 (1 H, m) 3.35 - 3.56 (5 H, m) 3.58 - 3.85 (5 H, m) 4.02 - 4.19 (1 H, m) 4.33 - 4.49 (1 H, m) 7.09 - 7.28 (1 H, m) 7.53 - 7.71 (1 H, m) 8.05 - 8.15 (1 H, m) 8.55 - 8.67 (1 H, m) 8.87 - 9.02 (1 H, m)	LCMS (ESI+) calcd for C21 H27 N5 O (M+H+) 366.4, found 366.5
ER-887271	$C_{22}H_{29}N_5O$	379.5	0.0150	>2.0	5-((2S,6R)-2-(((2R,5R)-2,5-dimethylpiperazin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 1.20 - 1.28 (3 H, d) 1.33-1.40 (6 H, m) 2.62 - 2.77 (2 H, m) 3.03 - 3.18 (4 H, m) 3.31 - 3.50 (4 H, m) 3.55 - 3.70 (2 H, m) 4.02 - 4.14 (1 H, m) 4.23 - 4.34 (1 H, m) 7.19 - 7.29 (1 H, m) 7.57 - 7.64 (1 H, m) 8.08 - 8.18 (1 H, m) 8.58 - 8.65 (1 H, m) 8.92 - 8.99 (1 H, m)	LCMS (ESI+) calcd for C22 H29 N5 O (M+H+) 380.5, found 380.7
ER-887272	$C_{22}H_{29}N_5O$	379.5	0.0340	>2.0	5-((2S,6R)-2-(((2R,5S)-2,5-dimethylpiperazin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile		
ER-887442	$C_{23}H_{30}N_4O$	378.5	0.1487	>2.0	5-((2R,6S)-2-methyl-6-(((4-methylcyclohexyl)amino)methyl)morpholino)quinoline-8-carbonitrile		

FIG. 6AA

ER-887443		$C_{20}H_{24}N_4O$	336.4	0.1250	>2.0	5-((2S,6R)-2-((cyclobutylamino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.28 (d, J=6.15 Hz, 4 H) 1.85 - 1.95 (m, 2 H) 2.13 - 2.26 (m, 2 H) 2.33 (d, J=9.38 Hz, 2 H) 2.64 - 2.75 (m, 2 H) 2.95 - 3.01 (m, 1 H) 3.09 - 3.15 (m, 1 H) 3.40 (s, 1 H) 3.37 (s, 1 H) 3.75 - 3.81 (m, 1 H) 4.09 (d, J=6.15 Hz, 1 H) 4.16 - 4.23 (m, 1 H) 4.85 4.86 (m, 6 H) 7.23 (d, J=7.91 Hz, 1 H) 7.61 (dd, J=8.50, 4.39 Hz, 1 H) 8.12 (dt, J=7.91, 0.88 Hz, 1 H) 8.61 (d, J=8.79 Hz, 1 H) 8.94 - 8.97 (m, 1 H)
ER-887444		$C_{23}H_{30}N_4O$	378.5	0.1007	>2.0	5-((2S,6R)-2-((cycloheptylamino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.25 - 1.29 (m, 4 H) 1.55 (br. s., 4 H) 1.60 (br. s., 4 H) 1.63 - 1.71 (m, 3 H) 1.78 (br. s., 2 H) 2.08 (d, J=5.86 Hz, 2 H) 2.63 - 2.77 (m, 2 H) 3.08 - 3.15 (m, 1 H) 3.23 (d, J=14.65 Hz, 1 H) 3.29 (br. s., 1 H) 3.40 (s, 1 H) 3.37 (s, 1 H) 4.11 (d, J=7.62 Hz, 1 H) 4.18 - 4.25 (m, 1 H) 4.85 - 4.87 (m, 6 H) 7.21 - 7.25 (m, 1 H) 7.58 - 7.63 (m, 1 H) 8.10 - 8.14 (m, 1 H) 8.58 - 8.63 (m, 1 H) 8.93 - 8.96 (m, 1 H)
ER-887526		$C_{22}H_{28}N_4O_2$	380.5	0.1190	> 2.0	5-((2S,6R)-2-(((4-hydroxycyclohexyl)amino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.24 - 1.37 (m, 6 H) 1.40 - 1.54 (m, 2 H) 2.04 (s, 1 H) 2.01 (s, 1 H) 2.09 - 2.17 (m, 2 H) 2.64 - 2.76 (m, 2 H) 3.06 - 3.15 (m, 2 H) 3.21 - 3.25 (m, 1 H) 3.40 (s, 1 H) 3.37 (s, 1 H) 3.49 - 3.57 (m, 1 H) 4.07 - 4.14 (m, 1 H) 4.19 - 4.26 (m, 1 H) 4.80 - 4.85 (m, 7 H) 7.23 (d, J=7.91 Hz, 1 H) 7.61 (dd, J=8.50, 4.39 Hz, 1 H) 8.12 (d, J=7.91 Hz, 1 H) 8.60 (dd, J=8.79, 1.76 Hz, 1 H) 8.95 (dd, J=4.39, 1.76 Hz, 1 H)
ER-887528		$C_{21}H_{26}N_4O_2$	366.5	>2.0	>2.0	5-((2S,6R)-2-(((2-hydroxycyclopentyl)amino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	
ER-887538		$C_{23}H_{30}N_4O$	378.5	0.0400	>2.0	5-((2R,6S)-2-methyl-6-(((2-methylcyclohexyl)amino)methyl)morpholino)quinoline-8-carbonitrile	

FIG. 6BB

ER-887539	$C_{27}H_{25}N_5O$	435.5	0.0020	>2.0	5-((2R,6S)-2-methyl-6-(((5-phenylpyridin-2-yl)amino)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.19 (d, J=6.15 Hz, 4 H) 2.72 (dd, J=12.01, 10.25 Hz, 1 H) 2.83 - 2.89 (m, 1 H) 3.37 (d, J=12.01 Hz, 1 H) 3.59 (d, J=11.43 Hz, 1 H) 4.00 - 4.05 (m, 1 H) 4.39 - 4.48 (m, 4 H) 4.80 - 4.86 (m, 17 H) 7.18 (d, J=9.38 Hz, 1 H) 7.28 (d, J=7.91 Hz, 1 H) 7.39 - 7.50 (m, 3 H) 7.57 - 7.64 (m, 4 H) 8.14 (d, J=7.91 Hz, 1 H) 8.19 - 8.26 (m, 2 H) 8.64 - 8.68 (m, 1 H) 8.96 (dd, J=4.10, 1.76 Hz, 1 H)
ER-887540	$C_{27}H_{25}N_5O$	435.5	0.0060	>2.0	5-((2R,6S)-2-methyl-6-(((3-phenylpyridin-2-yl)amino)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.17 - 1.21 (m, 4 H) 2.67 - 2.73 (m, 1 H) 2.84 - 2.90 (m, 1 H) 3.38 (d, J=12.01 Hz, 1 H) 3.59 (d, J=12.01 Hz, 1 H) 4.02 - 4.08 (m, 1 H) 4.41 - 4.53 (m, 3 H) 4.83 - 4.87 (m, 14 H) 7.00 - 7.05 (m, 1 H) 7.28 (d, J=7.91 Hz, 1 H) 7.44 - 7.64 (m, 6 H) 7.78 (dd, J=7.32, 1.17 Hz, 1 H) 7.99 - 8.03 (m, 1 H) 8.14 (d, J=7.91 Hz, 1 H) 8.63 - 8.67 (m, 1 H) 8.94 - 8.97 (m, 1 H)
ER-887586	$C_{21}H_{26}N_4O_2$	366.5	0.0860	> 2.0	5-((2S,6R)-2-((((1S,3R)-3-hydroxycyclopentyl)amino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.23 - 1.29 (m, 4 H) 1.80 - 1.87 (m, 3 H) 1.93 - 2.04 (m, 3 H) 2.12 - 2.19 (m, 2 H) 2.29 - 2.34 (m, 2 H) 2.64 - 2.79 (m, 5 H) 3.09 - 3.16 (m, 1 H) 3.24 (d, J=2.93 Hz, 1 H) 3.36 - 3.43 (m, 4 H) 3.64 - 3.70 (m, 1 H) 4.08 - 4.13 (m, 1 H) 4.20 - 4.26 (m, 1 H) 4.30 - 4.34 (m, 1 H) 4.82 - 4.86 (m, 7 H) 7.24 (d, J=8.20 Hz, 1 H) 7.59 - 7.63 (m, 1 H) 8.13 (d, J=7.91 Hz, 1 H) 8.59 8.63 (m, 1 H) 8.94 - 8.96 (m, 1 H)
ER-887587	$C_{23}H_{25}N_5O_2$	403.5	0.0020	> 2.0	5-((2S,6R)-2-(((3-ethoxypyridin-2-yl)amino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.14 - 1.18 (m, 4 H) 1.45 - 1.50 (m, 4 H) 2.63 - 2.70 (m, 1 H) 2.80 - 2.87 (m, 1 H) 3.33 - 3.42 (m, 1 H) 3.54 (d, J=11.43 Hz, 1 H) 3.97 - 4.03 (m, 1 H) 4.24 (q, J=7.03 Hz, 3 H) 4.35 - 4.43 (m, 3 H) 4.81 - 4.85 (m, 7 H) 6.80 - 6.86 (m, 1 H) 7.23 - 7.28 (m, 1 H) 7.32 - 7.41 (m, 1 H) 7.51 - 7.54 (m, 1 H) 7.59 - 7.64 (m, 1 H) 8.12 - 8.15 (m, 1 H) 8.60 - 8.66 (m, 1 H) 8.94 - 8.97 (m, 1 H)
ER-887588	$C_{27}H_{25}N_5O$	435.5	0.0030	> 2.0	5-((2R,6S)-2-methyl-6-(((2-phenylpyridin-4-yl)amino)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.18 (d, J=6.15 Hz, 3 H) 2.32 (s, 1 H) 2.57 (d, J=11.72 Hz, 1 H) 2.79 (s, 1 H) 3.03 (d, J=11.72 Hz, 1 H) 3.39 - 3.43 (m, 1 H) 4.05 - 4.10 (m, 1 H) 4.20 - 4.23 (m, 1 H) 4.81 - 4.86 (m, 21 H) 6.73 (d, J=2.93 Hz, 1 H) 6.87 - 6.89 (m, 1 H) 7.11 (s, 1 H) 7.13 (s, 1 H) 7.52 - 7.61 (m, 6 H) 8.08 (d, J=7.91 Hz, 1 H) 8.21 (s, 1 H) 8.23 (s, 1 H) 8.40 (s, 1 H) 8.41 (s, 1 H) 8.93 - 8.95 (m, 1 H)

FIG. 6CC

ER-887589	$C_{27}H_{25}N_5O$	435.5	0.1730	> 2.0	5-((2R,6S)-2-methyl-6-(((6-phenylpyridin-2-yl)amino)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.06 (br. s., 1 H) 1.97 - 2.02 (m, 1 H) 2.30 - 2.32 (m, 1 H) 2.64 (d, J=9.96 Hz, 1 H) 2.79 (s, 1 H) 2.85 - 2.88 (m, 1 H) 3.33 (s, 1 H) 3.36 - 3.41 (m, 1 H) 3.43 (d, J=4.98 Hz, 1 H) 3.47 (s, 1 H) 3.75 - 3.79 (m, 1 H) 4.81 - 4.85 (m, 19 H) 7.12 (d, J=9.38 Hz, 1 H) 7.19 (d, J=7.32 Hz, 1 H) 7.24 (d, J=8.20 Hz, 1 H) 7.58 - 7.63 (m, 4 H) 7.78 - 7.82 (m, 2 H) 7.98 - 8.03 (m, 1 H) 8.12 (s, 1 H) 8.13 (s, 1 H) 8.61 - 8.64 (m, 1 H) 8.94 - 8.96 (m, 1 H)	
ER-887612	$C_{20}H_{19}N_5O$	345.4	0.6110	> 2.0	(S)-5-(2-((pyridin-2-ylamino)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-d) d ppm 2.64 - 2.78 (m, 1 H) 3.04 (td, J=11.80, 3.10 Hz, 1 H) 3.25 (d, 1 H) 3.79 - 4.09 (m, 4 H) 4.35 (t, J=9.51 Hz, 1 H) 4.80 (d, 1 H) 6.52 (br. s., 1 H) 7.02 - 7.13 (m, 1 H) 7.17 - 7.29 (m, 1 H) 7.37 - 7.56 (m, 3 H) 8.00 (d, J=7.90 Hz, 1 H) 8.41 - 8.52 (m, 1 H) 9.01 (dd, J=4.27, 1.71 Hz, 1 H)	LCMS (ESI+) calcd for C20H19N5O (M+H+): 346.16, found: 346.33
ER-887722	$C_{21}H_{25}N_5O_2$	379.5	0.0170	> 2.0	5-((2R,6S)-2-methyl-6-((2-methyl-5-oxopiperazin-1-yl)methyl)morpholino)quinoline-8-carbonitrile		
ER-887723	$C_{21}H_{27}N_5O$	365.5	0.0160	>10 & < 30	5-((2R,6S)-2-methyl-6-((4-methylpiperazin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 1.25 (3 H, d) 2.57 - 2.75 (2 H, m) 2.93 (3 H, s) 3.11 - 3.22 (2 H, m) 3.31 - 3.42 (3 H, m) 3.44 - 3.60 (7 H, m) 4.04 - 4.18 (1 H, m) 4.29 - 4.43 (1 H, m) 7.16 - 7.27 (1 H, m) 7.54 - 7.64 (1 H, m) 8.06 - 8.14 (1 H, m) 8.57 - 8.65 (1 H, m) 8.90 - 8.98 (1 H, m)	LCMS (ESI+) calcd for C21 H27 N5 O (M+H+) 366.4, found 366.6
ER-887724	$C_{23}H_{31}N_5O$	393.5	0.0150	> 30	5-((2R,6S)-2-methyl-6-((4-propylpiperazin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 0.99 (3 H, t) 1.23 (3 H, d) 1.65 - 1.78 (2 H, m) 2.56 - 2.66 (1 H, m) 2.68 - 2.77 (1 H, m) 2.91 - 3.00 (2 H, m) 3.02 - 3.16 (2 H, m) 3.27 (4 H, d) 3.34 - 3.49 (6 H, m) 3.98 - 4.15 (1 H, m) 4.21 - 4.37 (1 H, m) 7.16 - 7.27 (1 H, m) 7.57 - 7.63 (1 H, m) 8.07 - 8.17 (1 H, m) 8.54 - 8.65 (1 H, m) 8.90 - 8.99 (1 H, m)	LCMS (ESI+) calcd for C23 H31 N5 O (M+H+) 394.5, found 394.6

FIG. 6DD

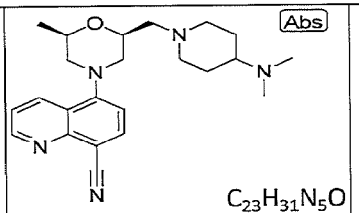
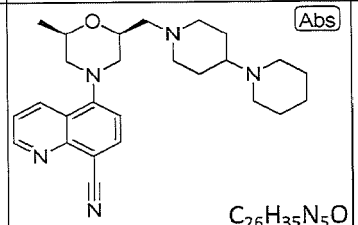
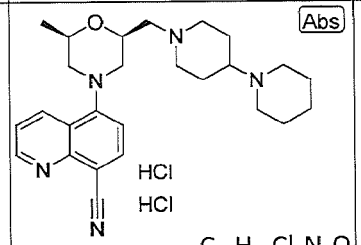
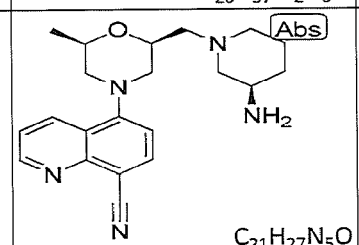
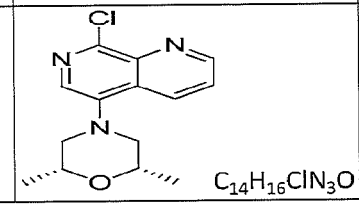
ER-887725	 $C_{23}H_{31}N_5O$	393.5	0.0080	0.8	5-((2S,6R)-2-((4-(dimethylamino)piperidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 1.27 (3 H, d) 2.03 - 2.26 (2 H, m) 2.28 - 2.46 (2 H, m) 2.62 - 2.78 (2 H, m) 2.90 (6 H, s) 3.13 - 3.22 (2 H, m) 3.29 - 3.44 (4 H, m) 3.47 - 3.63 (1 H, m) 3.78 - 3.96 (2 H, m) 4.06 - 4.19 (1 H, m) 4.35 - 4.52 (1 H, m) 7.16 - 7.32 (1 H, m) 7.54 - 7.66 (1 H, m) 8.12 (1 H, d) 8.61 (1 H, d) 8.88 - 9.02 (1 H, m)	LCMS (ESI+) calcd for C23 H31 N5 O (M+H+) 394.5, found 394.7
ER-887927	 $C_{26}H_{35}N_5O$	433.6	0.0114	0.719	5-((2S,6R)-2-([1,4'-bipiperidin]-1'-ylmethyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 1.26 (3 H, d) 1.43 - 1.60 (1 H, m) 1.71 - 1.86 (3 H, m) 1.90 - 2.04 (2 H, m) 2.08 - 2.28 (2 H, m) 2.38 (2 H, br. s.) 2.63 - 2.79 (2 H, m) 3.00 - 3.05 (3 H, m) 3.30 - 3.42 (4 H, m) 3.52 (4 H, br. s.) 3.77 - 3.94 (2 H, m) 4.12 (1 H, d) 4.43 (1 H, br. s.) 7.23 (1 H, d) 7.49 - 7.71 (1 H, m) 8.11 (1 H, s) 8.50 - 8.66 (1 H, m) 8.85 - 8.99 (1 H, m)	LCMS (ESI+) calcd for C26 H35 N5 O (M+H+) 434.5, found 434.6
ER-887927	 $C_{26}H_{37}Cl_2N_5O$	433.6	0.0109	0.41482	5-((2S,6R)-2-([1,4'-bipiperidin]-1'-ylmethyl)-6-methylmorpholino)quinoline-8-carbonitrile dihydrochloride	^{1}H NMR (400 MHz, DMSO-d_6) d ppm 1.21 (d, J=6.20 Hz, 3 H) 1.31 - 1.51 (m, 1 H) 1.71 (d, J=13.03 Hz, 1 H) 1.76 - 2.03 (m, 4 H) 2.11 - 2.30 (m, 2 H) 2.30 - 2.41 (m, 2 H) 2.60 - 2.80 (m, 2 H) 2.80 - 3.01 (m, 2 H) 3.03 - 3.21 (m, 2 H) 3.37 - 3.53 (m, 2 H) 3.63 (d, J=11.75 Hz, 1 H) 3.80 (d, J=12.60 Hz, 1 H) 3.97 - 4.15 (m, 1 H) 4.50 (t, J=9.19 Hz, 1 H) 7.19 - 7.34 (m, 1 H) 7.63 - 7.76 (m, 1 H) 8.29 (d, J=8.12 Hz, 1 H) 8.55 - 8.67 (m, 1 H) 9.07 (dd, J=4.27, 1.71 Hz, 1 H) 10.84 (br. s., 1 H) 10.94 (br. s., 1 H)	LCMS (ESI+) calcd for C26H37Cl2N5O (M+H+): 434.23, found: 434.55
ER-887928	 $C_{21}H_{27}N_5O$	365.5	0.1410	> 2.0	5-((2S,6R)-2-(((R)-3-aminopiperidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.26 (d, J=6.15 Hz, 3 H) 1.41 (br. s., 1 H) 1.51 - 1.77 (m, 2 H) 1.78 - 2.02 (m, 2 H) 2.03 - 2.29 (m, 2 H) 2.57 - 2.81 (m, 2 H) 3.10 (s, 1 H) 3.05 (s, 1 H) 3.32 (br. s., 1 H) 3.40 (s, 1 H) 3.37 (s, 1 H) 3.59 (br. s., 2 H) 3.73 (br. s., 2 H) 4.12 (dd, J=8.20, 6.45 Hz, 2 H) 4.42 (br. s., 1 H) 4.59 - 4.82 (m, 1 H) 7.24 (d, J=8.20 Hz, 1 H) 7.44 - 7.65 (m, 1 H) 8.13 (d, J=7.91 Hz, 1 H) 8.61 (dd, J=8.50, 1.76 Hz, 1 H) 8.92 - 8.99 (m, 1 H)	
ER-887960	 $C_{14}H_{16}ClN_3O$	277.8	1.1800	>20	(2R,6S)-4-(8-chloro-1,7-naphthyridin-5-yl)-2,6-dimethylmorpholine		

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FIG. 6EE

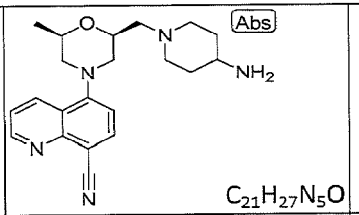
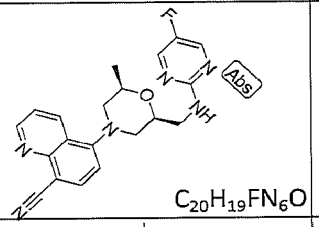
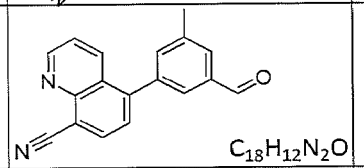
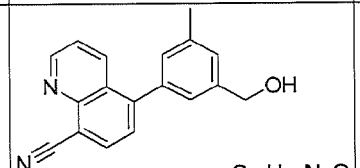
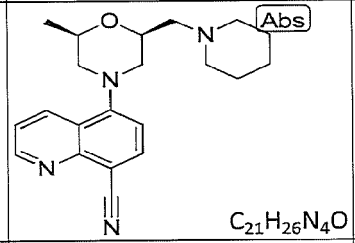
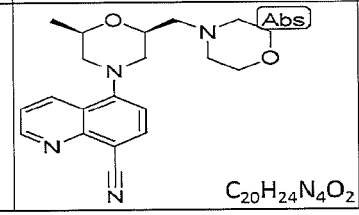
ER-888070	 $C_{21}H_{27}N_5O$	365.5	0.0215	0.352	5-((2S,6R)-2-((4-aminopiperidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 1.26 (3 H, d) 1.95 - 2.10 (2 H, m) 2.18 - 2.32 (2 H, m) 2.63 - 2.74 (2 H, m) 3.32 - 3.39 (5 H, m) 3.41 - 3.54 (2H, m) 3.72 - 3.92 (2 H, m) 4.08 - 4.18 (1 H, m) 4.36 - 4.52 (1 H, m) 7.19 - 7.27 (1 H, m) 7.54 - 7.64 (1 H, m) 8.04 - 8.17 (1 H, m) 8.54 - 8.66 (1 H, m) 8.89 - 9.02 (1 H, m)	LCMS (ESI+) calcd for C21 H27 N5 O (M+H+) 366.4, found 366.2
ER-888137	 $C_{20}H_{19}FN_6O$	378.4	0.1860	> 2.0	5-((2S,6R)-2-(((5-fluoropyrimidin-2-yl)amino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.20 - 1.27 (m, 7 H) 2.61 (d, J=11.72 Hz, 1 H) 2.65 - 2.71 (m, 1 H) 3.33 (s, 1 H) 3.36 (s, 1 H) 3.40 (s, 1 H) 3.43 (s, 1 H) 3.47 - 3.50 (m, 2 H) 4.81 - 4.90 (m, 18 H) 7.19 (d, J=8.20 Hz, 1 H) 7.56 - 7.59 (m, 1 H) 8.09 (s, 1 H) 8.11 (s, 1 H) 8.20 (s, 1 H) 8.38 (br. s., 1 H) 8.56 - 8.59 (m, 1 H) 8.92 - 8.94 (m, 1 H)	
ER-888200	 $C_{18}H_{12}N_2O$	272.306	0.8580	> 2.0	5-(3-formyl-5-methylphenyl)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-d) d ppm 2.57 (s, 3 H) 7.50 - 7.57 (m, 2 H) 7.60 (d, J=7.48 Hz, 1 H) 7.74 - 7.81 (m, 1 H) 7.85 (d, J=0.85 Hz, 1 H) 8.15 - 8.28 (m, 2 H) 9.15 (dd, J=4.17, 1.60 Hz, 1 H) 10.10 (s, 1 H)	LCMS (ESI+) calcd for C18H12N2O (M+H+) 273.10, found: 273.26
ER-888201	 $C_{18}H_{14}N_2O$	274.322	0.1240	> 2.0	5-(3-(hydroxymethyl)-5-methylphenyl)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-d) d ppm 2.47 (d, J=0.64 Hz, 3 H) 4.79 (s, 2 H) 7.15 - 7.22 (m, 1 H) 7.27 (m, 1 H) 7.31 - 7.37 (m, 1 H) 7.51 (dd, J=8.65, 4.17 Hz, 1 H) 7.56 (d, J=7.26 Hz, 1 H) 8.16 (d, J=7.48 Hz, 1 H) 8.31 (dd, J=8.76, 1.71 Hz, 1 H) 9.10 (dd, J=4.27, 1.71 Hz, 1 H)	LCMS (ESI+) calcd for C18H13ClN2 (M+H+) 275.11, found: 275.24
ER-888202	 $C_{21}H_{26}N_4O$	350.5	0.0670	> 2.0	5-((2R,6S)-2-methyl-6-(piperidin-1-ylmethyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.27 (d, J=6.45 Hz, 4 H) 1.75 - 1.99 (m, 5 H) 2.65 - 2.75 (m, 3 H) 2.98 - 3.07 (m, 3 H) 3.19 - 3.25 (m, 2 H) 3.33 - 3.41 (m, 3 H) 3.62 (s, 1 H) 3.59 (s, 1 H) 4.11 - 4.16 (m, 1 H) 4.37 - 4.44 (m, 1 H) 4.80 - 4.84 (m, 3 H) 7.24 (d, J=7.91 Hz, 1 H) 7.59 - 7.63 (m, 1 H) 8.11 - 8.14 (m, 1 H) 8.63 (dd, J=8.50, 1.76 Hz, 1 H) 8.96 (dd, J=4.10, 1.76 Hz, 1 H)	
ER-888203	 $C_{20}H_{24}N_4O_2$	350.5	0.2060	> 2.0	5-((2R,6S)-2-methyl-6-(morpholinomethyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.24 - 1.29 (m, 4 H) 2.65 - 2.76 (m, 2 H) 3.26 - 3.40 (m, 6 H) 4.09 - 4.16 (m, 1 H) 4.41 - 4.48 (m, 1 H) 4.80 - 4.86 (m, 18 H) 4.90 (s, 1 H) 7.23 (d, J=7.91 Hz, 1 H) 7.60 (dd, J=8.50, 4.39 Hz, 1 H) 8.11 (d, J=7.91 Hz, 1 H) 8.58 - 8.62 (m, 1 H) 8.92 - 8.95 (m, 1 H)	

FIG. 6FF

ER-888204	$C_{22}H_{28}N_4O_2$	380.5	0.3350	> 2.0	5-((2S,6R)-2-(((2S,6R)-2,6-dimethylmorpholino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.19 - 1.29 (m, 11 H) 2.66 - 2.80 (m, 5 H) 3.29 - 3.41 (m, 4 H) 3.55 (dd, J=18.16, 12.89 Hz, 2 H) 4.12 - 4.18 (m, 1 H) 4.46 (br. s., 1 H) 4.80 - 4.86 (m, 11 H) 7.24 (d, J=8.20 Hz, 1 H) 7.62 (dd, J=8.50, 4.39 Hz, 1 H) 8.13 (d, J=7.91 Hz, 1 H) 8.62 (dd, J=8.50, 1.76 Hz, 1 H) 8.94 - 8.97 (m, 1 H)
ER-888205	$C_{22}H_{28}N_4O_3$	396.5	0.3550	> 2.0	5-((2S,6R)-2-(((2R,6R)-2-(hydroxymethyl)-6-methylmorpholino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.26 (dd, J=12.89, 6.15 Hz, 8 H) 2.66 - 2.84 (m, 4 H) 2.98 (t, J=11.72 Hz, 1 H) 3.30 - 3.42 (m, 5 H) 3.56 (d, J=12.01 Hz, 1 H) 3.60 - 3.66 (m, 4 H) 3.83 (d, J=10.25 Hz, 1 H) 4.13 - 4.18 (m, 1 H) 4.80 - 4.87 (m, 12 H) 7.25 (d, J=7.91 Hz, 1 H) 7.60 - 7.64 (m, 1 H) 8.13 (d, J=7.91 Hz, 1 H) 8.61 - 8.64 (m, 1 H) 8.94 - 8.97 (m, 1 H)
ER-888285	$C_{25}H_{28}N_6O$	428.5	0.1200	> 2.0	5-((2R,6S)-2-methyl-6-((4-(pyridin-2-yl)piperazin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.29 (d, J=6.15 Hz, 4 H) 2.67 - 2.78 (m, 2 H) 3.35 - 3.43 (m, 5 H) 3.53 (br. s., 2 H) 4.14 - 4.19 (m, 1 H) 4.47 (d, J=7.91 Hz, 1 H) 6.86 - 6.90 (m, 1 H) 7.08 (d, J=8.79 Hz, 1 H) 7.25 (d, J=7.91 Hz, 1 H) 7.62 (dd, J=8.50, 4.39 Hz, 1 H) 7.75 - 7.79 (m, 1 H) 8.12 - 8.15 (m, 2 H) 8.61 - 8.65 (m, 1 H) 8.95 - 8.97 (m, 1 H)
ER-888286	$C_{25}H_{28}N_6O$	428.5	1.3700	> 2.0	5-((2R,6S)-2-methyl-6-((4-(pyridin-4-yl)piperazin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.22 (d, J=6.15 Hz, 2 H) 2.60 - 2.80 (m, 2 H) 3.29 - 3.49 (m, 5 H) 3.56 (s, 1 H) 3.53 (s, 1 H) 3.94 - 4.13 (m, 2 H) 4.18 - 4.42 (m, 2 H) 4.43 - 4.66 (m, 1 H) 4.83 - 5.07 (m, 5 H) 7.25 - 7.48 (m, 2 H) 7.59 - 7.75 (m, 1 H) 8.18 (d, J=7.91 Hz, 1 H) 8.37 (d, J=7.62 Hz, 2 H) 8.63 - 8.77 (m, 1 H) 8.99 - 9.03 (m, 1 H)
ER-888288	$C_{23}H_{29}N_5O_2$	407.5	0.0220	> 10.0	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)piperidin-4-yl)acetamide	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.27 (d, J=6.45 Hz, 3 H) 1.72 - 1.85 (m, 1 H) 1.90 - 1.96 (m, 3 H) 2.09 - 2.20 (m, 2 H) 2.64 - 2.75 (m, 2 H) 3.11 - 3.20 (m, 2 H) 3.29 - 3.41 (m, 3 H) 3.73 (s, 1 H) 3.70 (s, 1 H) 3.85 - 3.92 (m, 1 H) 4.09 - 4.16 (m, 1 H) 4.41 (d, J=8.20 Hz, 1 H) 4.81 - 4.86 (m, 8 H) 7.23 (d, J=7.91 Hz, 1 H) 7.61 (dd, J=8.50, 4.39 Hz, 1 H) 8.12 (d, J=7.91 Hz, 1 H) 8.61 (dd, J=8.50, 1.47 Hz, 1 H) 8.95 (dd, J=4.10, 1.76 Hz, 1 H)
ER-888288	$C_{23}H_{30}ClN_5O_2$	407.5	0.0050	> 10.0	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)piperidin-4-yl)acetamide hydrochloride	1H NMR (400 MHz, METHANOL-d4) d ppm 1.27 (3 H, d) 1.69 - 1.86 (2 H, m) 1.93 (3 H, s) 2.04 - 2.20 (3 H, m) 2.60 - 2.79 (3 H, m) 3.07 - 3.22 (2 H, m) 3.36 - 3.42 (2 H, m) 3.67 - 3.76 (2 H, m) 3.82 - 3.94 (1 H, m) 4.08 - 4.18 (1 H, m) 4.35 - 4.46 (1 H, m) 7.15 - 7.28 (1 H, m) 7.54 - 7.66 (1 H, m) 8.05 - 8.17 (1 H, m) 8.56 - 8.65 (1 H, m) 8.89 - 8.99 (1 H, m)

LCMS (ESI+) calcd for C23 H29 N5 O2 (M+H+) 408.5, found 408.6

FIG. 6GG

ER-888289	$C_{24}H_{22}N_6O$	410.5	0.0740	> 2.0	5-(((2S,6R)-2-(((1,8-naphthyridin-2-yl)amino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.17 (d, J=6.15 Hz, 3 H) 1.94 (s, 1 H) 2.64 (dd, J=12.01, 10.25 Hz, 2 H) 2.86 - 2.99 (m, 1 H) 3.29 - 3.48 (m, 3 H) 3.64 (s, 1 H) 3.61 (s, 1 H) 3.80 - 4.05 (m, 2 H) 4.37 - 4.57 (m, 1 H) 4.66 (dd, J=13.18, 8.20 Hz, 1 H) 4.78 - 4.98 (m, 6 H) 5.37 (dd, J=13.18, 2.64 Hz, 1 H) 7.15 (d, J=9.08 Hz, 1 H) 7.29 (d, J=7.91 Hz, 1 H) 7.42 - 7.59 (m, 1 H) 7.65 (dd, J=8.50, 4.10 Hz, 2 H) 8.04 - 8.29 (m, 2 H) 8.56 - 8.75 (m, 2 H) 8.76 - 8.90 (m, 1 H) 8.91 - 9.09 (m, 1 H)	
ER-888320	$C_{22}H_{27}N_5O_2$	393.5	0.0520	> 2.0	1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)piperidine-4-carboxamide	1H NMR (400 MHz, METHANOL-d4) d ppm 1.25 (3 H, d) 2.05 - 2.23 (3 H, m) 2.35 - 2.47 (2 H, m) 2.61 - 2.77 (2 H, m) 3.10 - 3.21 (3 H, m) 3.31 - 3.42 (2 H, m) 3.68 (1 H, br. s.) 3.74 - 3.94 (2 H, m) 4.08 - 4.21 (1 H, m) 4.38 - 4.50 (1 H, m) 7.17 - 7.27 (1 H, m) 7.54 - 7.66 (1 H, m) 8.09 - 8.16 (1 H, m) 8.57 - 8.66 (1 H, m) 8.89 - 8.98 (1 H, m)	LCMS (ESI+) calcd for C22 H27 N5 O2 (M+H+) 394.4, found 394.5
ER-888321	$C_{28}H_{31}N_5O_2$	469.6	0.0072	> 2.0	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)piperidin-4-yl)benzamide	1H NMR (400 MHz, METHANOL-d4) d ppm 1.27 (3 H, d) 1.85 - 2.08 (2 H, m) 2.10 - 2.35 (3 H, m) 2.59 - 2.82 (2 H, m) 3.24 - 3.31 (2 H, m) 3.33 - 3.43 (3 H, m) 3.72 - 3.82 (2 H, m) 4.09 - 4.21 (2 H, m) 4.35 - 4.50 (1 H, m) 7.21 - 7.27 (1 H, m) 7.39 - 7.48 (2 H, m) 7.49 - 7.54 (1 H, m) 7.58 - 7.66 (1 H, m) 7.72 - 7.86 (2 H, m) 8.08 - 8.19 (1 H, m) 8.57 - 8.69 (1 H, m) 8.90 - 9.02 (1 H, m)	LCMS (ESI+) calcd for C28 H31 N5 O2 (M+H+) 470.5, found 470.6
ER-888322	$C_{23}H_{31}N_5O$	393.5	0.0630	> 2.0	5-((2S,6R)-2-((4-isopropylpiperazin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.22 (d, J=6.15 Hz, 4 H) 1.31 - 1.36 (m, 8 H) 2.63 (dd, J=12.31, 10.25 Hz, 1 H) 2.72 (dd, J=12.01, 10.25 Hz, 1 H) 2.81 - 2.87 (m, 2 H) 3.29 - 3.41 (m, 6 H) 3.43 - 3.52 (m, 1 H) 4.04 - 4.09 (m, 1 H) 4.19 - 4.25 (m, 1 H) 7.22 (d, J=8.20 Hz, 1 H) 7.58 - 7.62 (m, 1 H) 8.12 (d, J=7.91 Hz, 1 H) 8.61 (dd, J=8.50, 1.76 Hz, 1 H) 8.95 (dd, J=4.39, 1.76 Hz, 1 H)	
ER-888330	$C_{21}H_{26}N_6O_2$	394.5	0.4570	> 2.0	4-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)piperazine-1-carboxamide	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.25 (br. s., 1 H) 1.33 (d, J=6.15 Hz, 3 H) 2.67 - 2.84 (m, 2 H) 3.23 (br. s., 2 H) 3.27 - 3.49 (m, 6 H) 4.19 (d, J=6.15 Hz, 2 H) 4.47 (br. s., 2 H) 4.84 - 5.07 (m, 6 H) 7.30 (d, J=8.20 Hz, 1 H) 7.49 - 7.77 (m, 2 H) 8.18 (d, J=8.20 Hz, 1 H) 8.67 (dd, J=8.50, 1.76 Hz, 1 H) 8.85 - 9.06 (m, 1 H)	

FIG. 6HH

ER-888479	Abs $C_{27}H_{36}N_4O$	432.6	0.3220	> 2.0	5-((2S,6R)-2-((4-cyclohexylpiperidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 0.85 - 1.04 (2 H, m) 1.11 - 1.21 (3 H, m) 1.27 (3 H, d) 1.38 - 1.41 (2 H, m) 1.66 (1 H, d) 1.69 - 1.80 (5 H, m) 1.89 - 2.06 (2 H, m) 2.61 - 2.77 (2 H, m) 2.87 - 3.06 (2 H, m) 3.20 - 3.24 (2 H, m) 3.31 - 3.43 (3 H, m) 3.63 - 3.72 (2 H, m) 4.06 - 4.18 (1 H, m) 4.37 - 4.44 (1 H, m) 7.18 - 7.27 (1 H, m) 7.56 - 7.65 (1 H, m) 8.06 - 8.16 (1 H, m) 8.57 - 8.65 (1 H, m) 8.91 - 8.98 (1 H, m)	LCMS (ESI+) calcd for C27 H36 N4 O (M+H+) 433.6, found 433.2
ER-888480	Abs $C_{25}H_{33}N_5O$	419.6	0.0263	0.536	5-((2R,6S)-2-methyl-6-((4-(pyrrolidin-1-yl)piperidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.29 (d, J=6.45 Hz, 2 H) 1.98 (s, 2 H) 2.12 (s, 2 H) 2.45 (br. s., 2 H) 2.64 - 2.80 (m, 1 H) 3.19 (br. s., 2 H) 3.24 - 3.51 (m, 4 H) 3.70 (br. s., 1 H) 3.81 (br. s., 1 H) 3.88 (br. s., 1 H) 4.09 - 4.20 (m, 1 H) 4.45 (br. s., 1 H) 4.77 (s, 1 H) 4.81 - 4.88 (m, 16 H) 4.92 (s, 1 H) 7.26 (d, J=8.20 Hz, 1 H) 7.64 (dd, J=8.50, 4.10 Hz, 1 H) 8.15 (d, J=7.91 Hz, 1 H) 8.58 - 8.68 (m, 1 H) 8.90 - 9.06 (m, 1 H)	
ER-888603	Abs $C_{24}H_{28}N_6O$	416.5	0.4060	> 2.0	5-((2R,6R)-2-((4-cyclohexyl-1H-1,2,3-triazol-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile		
ER-888604	Abs $C_{24}H_{22}N_6O$	410.5	0.1230	> 2.0	5-((2R,6R)-2-methyl-6-((4-phenyl-1H-1,2,3-triazol-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.21 (d, J=6.15 Hz, 4 H) 2.58 - 2.73 (m, 2 H) 3.33 (d, J=12.01 Hz, 1 H) 3.44 - 3.50 (m, 1 H) 4.01 - 4.09 (m, 1 H) 4.36 - 4.42 (m, 1 H) 4.54 - 4.61 (m, 1 H) 4.63 - 4.69 (m, 1 H) 4.83 - 4.86 (m, 4 H) 7.21 (d, J=8.20 Hz, 1 H) 7.29 - 7.34 (m, 1 H) 7.38 - 7.43 (m, 2 H) 7.59 (dd, J=8.50, 4.10 Hz, 1 H) 7.77 - 7.81 (m, 2 H) 8.10 (d, J=7.91 Hz, 1 H) 8.33 (s, 1 H) 8.58 - 8.62 (m, 1 H) 8.91 - 8.94 (m, 1 H)	
ER-888605	Abs $C_{26}H_{33}N_5O_2$	432.6	0.0360	> 2.0	5-((2R,6S)-2-methyl-6-((2-oxo-[1,4'-bipiperidin]-1'-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.24 (d, J=6.45 Hz, 3 H) 1.32 (s, 1 H) 1.39 (s, 1 H) 1.57 - 1.82 (m, 4 H) 1.83 - 2.05 (m, 2 H) 2.17 - 2.42 (m, 2 H) 2.48 - 2.74 (m, 3 H) 2.74 - 2.90 (m, 2 H) 3.24 (br. s., 2 H) 3.30 (br. s., 1 H) 3.38 (s, 1 H) 3.35 (s, 1 H) 4.08 (d, J=8.20 Hz, 1 H) 4.23 (br. s., 1 H) 4.43 (s, 1 H) 4.40 (s, 1 H) 4.75 (br. s., 1 H) 4.80 (br. s., 1 H) 4.90 (s, 1 H) 7.22 (d, J=8.20 Hz, 2 H) 7.61 (dd, J=8.50, 4.39 Hz, 1 H) 8.12 (d, J=7.91 Hz, 1 H) 8.43 (br. s., 2 H) 8.62 (d, J=8.50 Hz, 2 H) 8.95 (d, J=4.10 Hz, 1 H)	

FIG. 6II

ER-888644	$C_{18}H_{13}ClN_2$	292.768	1.0940	> 2.0	5-(3-(chloromethyl)-5-methylphenyl)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 2.48 (s, 3 H) 4.65 (s, 2 H) 7.23 (s, 1 H) 7.27 - 7.31 (m, 1 H) 7.37 (s, 1 H) 7.53 (dd, *J*=8.65, 4.17 Hz, 1 H) 7.58 (d, *J*=7.48 Hz, 1 H) 8.18 (d, *J*=7.48 Hz, 1 H) 8.29 (dd, *J*=8.55, 1.71 Hz, 1 H) 9.14 (dd, *J*=4.27, 1.71 Hz, 1 H)	LCMS (ESI+) calcd for C18H14N2O (M+H+) 293.08, found: 293.26
ER-888645	$C_{23}H_{23}N_3O$	357.455	0.3220	> 2.0	5-(3-((4-hydroxypiperidin-1-yl)methyl)-5-methylphenyl)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.52 - 1.78 (m, 2 H) 1.83 - 1.98 (m, 2 H) 2.21 (t, *J*=9.61 Hz, 2 H) 2.45 (s, 3 H) 2.70 - 2.88 (m, 2 H) 3.56 (s, 2 H) 3.65 - 3.85 (m, 1 H) 7.16 (s, 1 H) 7.25 - 7.31 (m, 2 H) 7.51 (dd, *J*=8.55, 4.06 Hz, 1 H) 7.58 (d, *J*=7.48 Hz, 1 H) 8.17 (d, *J*=7.48 Hz, 1 H) 8.33 (dd, *J*=8.55, 1.71 Hz, 1 H) 9.12 (dd, *J*=4.27, 1.71 Hz, 1 H)	LCMS (ESI+) calcd for C23H23N3O (M+H+) 358.19, found: 358.41
ER-888646	$C_{25}H_{28}N_4$	384.524	0.1380	0.4850	5-(3-((4-(dimethylamino)piperidin-1-yl)methyl)-5-methylphenyl)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.51 - 1.68 (m, 2 H) 1.70 - 1.97 (m, 2 H) 1.99 - 2.11 (m, 2 H) 2.25 - 2.40 (m, 4 H) 2.45(s, 3 H) 3.00 (d, 2 H) 3.56 (s, 2 H) 7.16 (s, 1 H) 7.21 (s, 1 H) 7.24 - 7.31 (m, 1 H) 7.51 (dd, *J*=8.55, 4.27 Hz, 1 H) 7.57 (d, *J*=7.48 Hz, 1 H) 8.17 (d, *J*=7.48 Hz, 1 H) 8.33 (dd, *J*=8.76, 1.71 Hz, 1 H) 9.12 (dd, *J*=4.27, 1.71 Hz, 1 H)	LCMS (ESI+) calcd for C25H28N4 (M+H+) 385.23, found: 385.46
ER-888647	$C_{23}H_{24}N_4$	356.471	0.2300	> 2.0	5-(3-methyl-5-((4-methylpiperazin-1-yl)methyl)phenyl)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 2.31 (s, 3 H) 2.36 - 2.65 (m, 11 H) 3.59 (s, 2 H) 7.15 (s, 1 H) 7.22 (s, 1 H) 7.25 - 7.31 (m, 1 H) 7.51 (dd, *J*=8.65, 4.17 Hz, 1 H) 7.57 (d, *J*=7.48 Hz, 1 H) 8.17 (d, *J*=7.48 Hz, 1 H) 8.32 (dd, *J*=8.55, 1.71 Hz, 1 H) 9.12 (dd, *J*=4.27, 1.71 Hz, 1 H)	LCMS (ESI+) calcd for C23H24N4 (M+H+) 357.20, found: 357.43
ER-888701	$C_{22}H_{24}N_6O$	388.5	0.0710	> 2.0	5-((2S,6R)-2-(((5-ethylpyrimidin-2-yl)amino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile		
ER-888838	$C_{23}H_{26}N_6O$	402.5	0.0020	> 2.0	5-((2S,6R)-2-(((6-amino-3,5-dimethylpyridin-2-yl)amino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 1.22 (3 H, d) 1.96 (3 H, s) 1.98 (3 H, s) 2.57 - 2.69 (1 H, m) 2.72 - 2.85 (1 H, m) 3.30 - 3.44 (2 H, m) 3.45 - 3.63 (2 H, m) 4.03 - 4.10 (1 H, m) 4.13 - 4.25 (1 H, m) 7.13 (1 H, s) 7.16 - 7.24 (1 H, m) 7.51 - 7.63 (1 H, m) 8.03 - 8.15 (1 H, m) 8.52 - 8.61 (1 H, m) 8.86 - 8.96 (1 H, m)	LCMS (ESI+) calcd for C23 H26 N6 O (M+H+) 403.4, found 403.6

FIG. 6JJ

ER-888896		$C_{20}H_{20}N_6O$	360.4	0.2100	> 30	5-((2R,6S)-2-methyl-6-((pyrazin-2-ylamino)methyl)morpholino)quinoline-8-carbonitrile	
ER-888977		$C_{21}H_{24}N_6O$	376.5	0.2100	> 2.0	5-((2S,6R)-2-(((1,3-dimethyl-1H-pyrazol-5-yl)amino)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	
ER-889363		$C_{17}H_{19}N_3O_2$	297.4			5-((2R,7R)-2-(hydroxymethyl)-7-methyl-1,4-oxazepan-4-yl)quinoline-8-carbonitrile	CDCl3/400 MHz: 1.36 (d, 3H, J= 6.4 Hz), 1.96 (m, 1H), 2.18 (dd, 1H, J= 4.4 & 8.4 Hz), 2.27 (m, 1H), 3.39 (dd, 1H, J= 8.8 & 12.8 Hz), 3.45-3.69 (m, 5H), 4.01 (m, 1H), 4.14 (m, 1H), 7.13 (d, 1H, J= 8.0 Hz), 7.51 (dd, 1H, J= 4.4 & 8.4 Hz), 8.02 (d, 1H, J= 8.0 Hz), 8.52 (dd, 1H, J= 1.2 & 8.4 Hz), 9.08 (dd, 1H, J= 1.2 & 4.4 Hz).
ER-889448		$C_{22}H_{29}N_5O$	379.5	0.0210	> 2.0	5-((2S,6R)-2-((4-ethylpiperazin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.17 - 1.38 (m, 4 H) 2.33 (s, 2 H) 2.54 - 2.81 (m, 4 H) 2.88 (br. s., 1 H) 2.97 - 3.13 (m, 3 H) 3.17 (br. s., 2 H) 3.29 - 3.53 (m, 3 H) 3.95 - 4.09 (m, 1 H) 4.13 (br. s., 1 H) 7.15 - 7.40 (m, 2 H) 7.56 - 7.83 (m, 2 H) 8.11 (d, J=7.91 Hz, 1 H) 8.28 (br. s., 1 H) 8.60 (d, J=8.79 Hz, 1 H) 8.90 - 9.16 (m, 1 H)
ER-889469		$C_{23}H_{29}N_5O$	391.5	0.0160	4.969	5-((2R,6S)-2-methyl-6-((3-(pyrrolidin-1-yl)azetidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.22 (d, J=6.15 Hz, 2 H) 1.88 - 2.04 (m, 3 H) 2.31 (s, 2 H) 2.53 - 2.75 (m, 2 H) 2.81 - 2.94 (m, 3 H) 2.94 - 3.09 (m, 2 H) 3.29 - 3.50 (m, 2 H) 3.61 - 3.81 (m, 2 H) 3.90 - 4.14 (m, 3 H) 7.07 - 7.29 (m, 2 H) 7.55 - 7.72 (m, 2 H) 7.99 - 8.23 (m, 2 H) 8.52 - 8.72 (m, 1 H) 8.78 - 9.01 (m, 1 H)

FIG. 6KK

ER-889470	Abs $C_{24}H_{31}N_5O$	405.5	0.0205	6.516		5-((2R,6S)-2-methyl-6-((3-(piperidin-1-yl)azetidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.23 (d, J=6.45 Hz, 2 H) 1.54 (d, J=4.39 Hz, 2 H) 1.60 - 1.83 (m, 3 H) 2.02 (d, J=16.11 Hz, 1 H) 2.32 (s, 2 H) 2.48 - 2.75 (m, 4 H) 2.88 (s, 1 H) 3.02 (s, 1 H) 3.06 - 3.25 (m, 2 H) 3.29 - 3.39 (m, 2 H) 3.40 - 3.61 (m, 1 H) 3.72 - 3.94 (m, 2 H) 3.99 - 4.26 (m, 3 H) 4.90 (br. s., 1 H) 7.22 (d, J=7.91 Hz, 1 H) 7.18 (d, J=7.91 Hz, 1 H) 7.51 - 7.75 (m, 2 H) 8.12 (d, J=7.91 Hz, 2 H) 8.19 (br. s., 2 H) 8.39 - 8.63 (m, 1 H) 8.95 (dd, J=4.39, 1.46 Hz, 1 H)	
ER-889504	$C_{28}H_{32}N_4$	424.589	0.4590	0.3170		5-(3-([1,4'-bipiperidin]-1'-ylmethyl)-5-methylphenyl)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-d) d ppm 1.44 (d, J=4.91 Hz, 2 H) 1.50 - 1.69 (m, 6 H) 1.79 (d, J=11.96 Hz, 2 H) 2.00 (td, J=11.75, 2.14 Hz, 2 H) 2.29 (t, J=11.43 Hz, 1 H) 2.45 (s, 3 H) 2.51 (br. s., 4 H) 2.99 (d, J=11.75 Hz, 2 H) 3.54 (s, 2 H) 7.15 (s, 1 H) 7.21 (s, 1 H) 7.24 - 7.30 (m, 1 H) 7.46 - 7.55 (m, 1 H) 7.57 (m, J=7.48 Hz, 1 H) 8.17 (m, J=7.48 Hz, 1 H) 8.33 (dd, J=8.55, 1.71 Hz, 1 H) 9.12 (dd, J=4.27, 1.71 Hz, 1 H)	LCMS (ESI+) calcd for C28H32N4 (M+H+) 425.27, found: 425.48
ER-889556	Abs $C_{22}H_{29}N_5O$	379.5	0.0855	> 2.0		5-((2S,6R)-2-(((R)-2,4-dimethylpiperazin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.01 - 1.10 (m, 4 H) 1.16 - 1.23 (m, 4 H) 1.87 - 1.97 (m, 1 H) 2.16 - 2.25 (m, 5 H) 2.29 - 2.38 (m, 1 H) 2.46 - 2.70 (m, 7 H) 2.84 - 2.98 (m, 2 H) 3.25 - 3.37 (m, 3 H) 3.96 - 4.12 (m, 2 H) 4.80 - 4.85 (m, 1 H) 7.11 - 7.18 (m, 1 H) 7.52 - 7.59 (m, 1 H) 8.00 - 8.08 (m, 1 H) 8.52 - 8.59 (m, 1 H) 8.86 - 8.92 (m, 1 H)	
ER-889557	Abs $C_{22}H_{28}N_4O_2$	380.5	0.4970	> 2.0		5-((2S,6R)-2-((4-(hydroxymethyl)piperidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.26 (d, J=6.15 Hz, 3 H) 1.47 - 1.69 (m, 2 H) 1.75 (d, J=3.22 Hz, 1 H) 1.83 - 2.04 (m, 2 H) 2.29 (s, 1 H) 2.53 - 2.75 (m, 2 H) 2.88 (s, 1 H) 2.94 - 3.10 (m, 2 H) 3.13 - 3.25 (m, 2 H) 3.29 - 3.50 (m, 3 H) 3.53 - 3.71 (m, 2 H) 3.90 - 4.17 (m, 1 H) 4.27 - 4.50 (m, 1 H) 7.09 - 7.29 (m, 1 H) 7.53 - 7.67 (m, 1 H) 7.96 - 8.16 (m, 1 H) 8.38 (br. s., 1 H) 8.49 - 8.76 (m, 1 H) 8.77 - 8.99 (m, 1 H)	
ER-889571	Abs $C_{24}H_{31}N_5O$	405.5	0.0050	5.01		5-((2S,6R)-2-((R)-[1,3'-bipyrrolidin]-1'-ylmethyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 1.18 - 1.25 (3 H, d) 1.94 - 2.01 (3 H, m) 2.29 - 2.36 (4 H, m) 2.60 - 2.73 (4 H, m) 2.91 - 3.00 (1 H, m) 3.09 - 3.19 (3 H, m) 3.32 - 3.40 (2 H, m) 7.15 - 7.26 (3 H, m) 7.58 - 7.63 (1 H, m) 7.64 - 7.71 (2 H, m) 8.08 - 8.16 (1 H, m) 8.43 - 8.49 (2 H, m) 8.57 - 8.66 (1 H, m) 8.91 - 9.01 (1 H, m)	LCMS (ESI+) calcd for C24 H31 N5 O (M+H+) 406.5, found 406.4

FIG. 6LL

ER-889572	$C_{25}H_{33}N_5O$	419.6	0.2515	> 2.0	5-((2R,6S)-2-methyl-6-(((R)-3-(piperidin-1-yl)pyrrolidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile		
ER-889601	$C_{22}H_{29}N_5O$	379.5	0.0185	9.4	5-((2R,6S)-2-methyl-6-((4-methyl-1,4-diazepan-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.23 (d, J=6.15 Hz, 3 H) 2.22 (br. s., 2 H) 2.29 (s, 4 H) 2.55 - 2.81 (m, 2 H) 2.93 (s, 2 H) 3.04 - 3.25 (m, 2 H) 3.29 - 3.40 (m, 2 H) 3.45 (br. s., 3 H) 3.66 (br. s., 3 H) 3.90 - 4.18 (m, 2 H) 4.32 (d, J=7.91 Hz, 1 H) 7.04 - 7.27 (m, 4 H) 7.38 - 7.61 (m, 1 H) 7.66 (d, J=8.20 Hz, 3 H) 7.97 - 8.12 (m, 1 H) 8.59 (d, J=7.62 Hz, 1 H) 8.92 (d, J=2.64 Hz, 1 H) 8.82 - 9.00 (m, 1 H)
ER-889602	$C_{27}H_{29}N_5O_2$	455.6	0.0530	> 2.0	5-((2S,6R)-2-((4-benzoylpiperazin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.22 (dd, J=6.15, 0.88 Hz, 4 H) 2.31 (s, 1 H) 2.58 - 2.86 (m, 8 H) 3.30 - 3.46 (m, 3 H) 3.51 (br. s., 2 H) 3.79 (br. s., 3 H) 3.91 - 4.11 (m, 2 H) 4.13 - 4.26 (m, 1 H) 7.04 - 7.30 (m, 2 H) 7.31 - 7.46 (m, 6 H) 7.49 - 7.70 (m, 2 H) 7.76 - 8.00 (m, 2 H) 8.04 - 8.19 (m, 2 H) 8.47 - 8.62 (m, 1 H) 8.78 - 8.95 (m, 1 H)
ER-889728	$C_{27}H_{30}N_6O_2$	470.6	0.0370	> 2.0	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)piperidin-4-yl)nicotinamide	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.06 (s, 1 H) 1.22 (d, J=6.45 Hz, 1 H) 1.30 (s, 1 H) 1.40 (s, 1 H) 1.47 (s, 1 H) 1.69 (br. s., 1 H) 1.92 (br. s., 1 H) 2.26 (s, 1 H) 2.51 (s, 1 H) 2.66 (s, 1 H) 2.62 (s, 1 H) 3.01 (s, 1 H) 3.17 (br. s., 1 H) 3.21 - 3.30 (m, 2 H) 3.34 (br. s., 1 H) 3.39 (br. s., 1 H) 3.87 (s, 1 H) 4.06 (br. s., 1 H) 4.15 (br. s., 1 H) 4.21 (s, 1 H) 4.37 (s, 1 H) 4.84 (s, 2 H) 5.00 (br. s., 1 H) 7.22 (d, J=8.20 Hz, 1 H) 7.50 (br. s., 1 H) 7.59 (br. s., 1 H) 7.82 (br. s., 1 H) 8.12 (d, J=7.62 Hz, 1 H) 8.21 (br. s., 1 H) 8.35 - 8.56 (m, 1 H) 8.56 - 8.78 (m, 1 H) 8.93 (d, J=4.10 Hz, 1 H)
ER-889729	$C_{27}H_{30}N_6O_2$	470.6	0.0220	> 2.0	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)piperidin-4-yl)isonicotinamide		

FIG. 6MM

ER-889734	Abs $C_{27}H_{30}N_6O_2$	470.6	0.2690		> 2.0	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)piperidin-4-yl)picolinamide	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.28 (d, J=6.15 Hz, 3 H) 1.75 - 1.97 (m, 2 H) 2.08 (br. s., 2 H) 2.59 - 2.84 (m, 3 H) 2.84 - 3.09 (m, 2 H) 3.24 - 3.49 (m, 4 H) 3.94 - 4.22 (m, 2 H) 4.30 (br. s., 1 H) 7.26 (d, J=8.20 Hz, 1 H) 7.51 - 7.60 (m, 1 H) 7.64 (dd, J=8.50, 4.39 Hz, 1 H) 7.91 - 8.02 (m, 1 H) 8.04 - 8.30 (m, 2 H) 8.45 (s, 1 H) 8.55 - 8.82 (m, 2 H) 8.94 - 9.16 (m, 1 H)
ER-889744	Abs $C_{27}H_{37}N_5O_2$	463.6	0.0590		> 2.0	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)piperidin-4-yl)hexanamide	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 0.72 - 0.96 (m, 2 H) 1.13 - 1.39 (m, 4 H) 1.46 - 1.75 (m, 3 H) 1.77 (s, 1 H) 1.88 (s, 1 H) 2.03 - 2.28 (m, 2 H) 2.40 (br. s., 1 H) 2.51 - 2.80 (m, 2 H) 2.91 (br. s., 1 H) 3.06 (d, J=6.45 Hz, 1 H) 3.17 (br. s., 1 H) 3.24 - 3.33 (m, 2 H) 3.33 - 3.55 (m, 2 H) 3.70 (br. s., 1 H) 4.07 (br. s., 1 H) 4.20 (br. s., 1 H) 4.87 (s, 3 H) 7.24 (d, J=8.20 Hz, 1 H) 7.63 (dd, J=8.50, 4.39 Hz, 1 H) 7.85 (s, 1 H) 8.14 (d, J=7.91 Hz, 1 H) 8.50 (s, 1 H) 8.57 8.81 (m, 1 H) 8.97 (dd, J=4.39, 1.46 Hz, 1 H)
ER-889745	Abs $C_{27}H_{37}N_5O_2$	435.6	0.0675	0.0052?	>10.0	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)piperidin-4-yl)isobutyramide	
ER-889745	Abs $C_{25}H_{33}N_5O_2$	472.0	0.0062		> 10.0	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)piperidin-4-yl)isobutyramide hydrochloride	1H NMR (400 MHz, METHANOL-d4) d ppm 0.97 - 1.08 (7 H, m) 1.11 - 1.17 (2 H, m) 1.20 - 1.29 (5 H, m) 1.96 - 2.04 (2 H, m) 2.32 - 2.45 (1 H, m) 2.60 - 2.74 (2 H, m) 2.95 - 3.03 (1 H, m) 3.32 - 3.40 (2 H, m) 7.19 - 7.26 (1 H, m) 7.57 - 7.66 (1 H, m) 8.08 - 8.17 (1 H, m) 8.26 - 8.37 (5 H, m) 8.59 - 8.66 (1 H, m) 8.92 - 8.99 (1 H, m)
ER-889746	Abs $C_{25}H_{34}ClN_5O_2$	449.6	0.1100		0.0049	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)piperidin-4-yl)pivalamide	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.18 (s, 2 H) 1.28 (t, J=6.15 Hz, 2 H) 1.44 (s, 1 H) 1.72 - 1.90 (m, 2 H) 1.93 (br. s., 1 H) 2.02 (br. s., 1 H) 2.23 (d, J=9.96 Hz, 1 H) 2.57 - 2.83 (m, 2 H) 2.92 (d, J=7.62 Hz, 1 H) 3.08 (br. s., 1 H) 3.20 - 3.35 (m, 3 H) 3.35 - 3.56 (m, 2 H) 3.89 (br. s., 2 H) 4.13 (br. s., 1 H) 4.29 (br. s., 1 H) 4.34 (br. s., 1 H) 4.88 (s, 3 H) 7.23 - 7.45 (m, 1 H) 7.56 - 7.82 (m, 1 H) 8.11 - 8.24 (m, 1 H) 8.32 (s, 1 H) 8.66 (d, J=8.79 Hz, 1 H) 8.95 - 9.11 (m, 1 H)
							LCMS (ESI+) calcd for C25 H33 N5 O2 (M+H+) 436.5, found 436.6

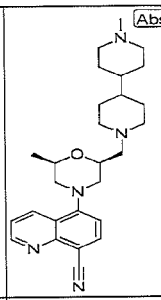
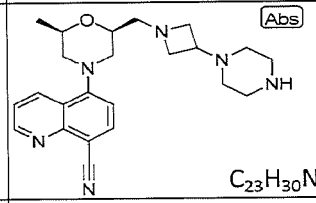
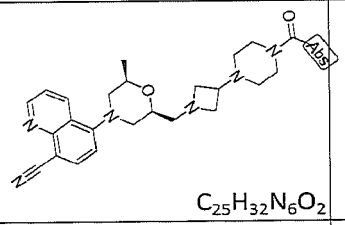
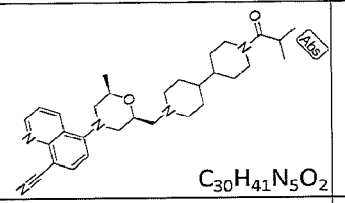
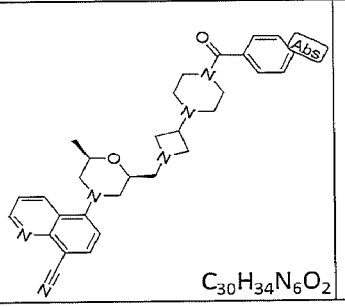
FIG. 6NN

ER-889822	$C_{27}H_{37}N_5O$	447.6	0.1470	0.155	5-((2S,7R)-2-([1,4'-bipiperidin]-1'-ylmethyl)-7-methyl-1,4-oxazepan-4-yl)quinoline-8-carbonitrile	1H NMR (400 MHz, CDCl3) d ppm 1.30 (3 H), 1.58 (5 H), 1.77 (3 H), 1.9 (3 H), 2.02 (2 H), 2.20 (2 H), 2.35 (1 H), 2.49 (2 H), 2.67 (3 H), 2.84 (1 H), 3.04 (1 H), 3.28 (1 H), 3.49 (2 H), 3.63 (1 H), 3.96 (1 H), 4.06 (1 H), 7.12 (1 H), 7.48 (1 H), 7.99 (1 H), 8.50 (1 H), 9.05 (1 H).	LCMS (ESI+) calcd for C27 H37 N5 O (M+H+) 448.6, found 448.5
ER-890093	$C_{25}H_{33}N_5O_2$	435.6	0.0400	> 2.0	5-((2R,6S)-2-methyl-6-((4-morpholinopiperidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	H NMR (400 MHz, DMSO-d6) d ppm 1.19 (3 H), 1.71 (1 H), 1.99 (1 H), 2.42 (1 H), 2.68 (6 h), 3.06 (1 H), 3.21 (1 H), 3.32 (6 H), 3.40 (2 H), 3.66 (4 H), 4.03 (1 H), 4.36 (1 H), 7.25 (1 H), 7.70 (1 H), 8.28 (1 H), 8.60 (1 H), 9.07 (1 H).	LCMS (ESI+) calcd for C25H33N5O2 (M+H+) 436.27, found: 436.41
ER-890094	$C_{27}H_{30}N_4$	410.562	0.7930	0.3870	5-(3-([1,4'-bipiperidin]-1'-ylmethyl)phenyl)quinoline-8-carbonitrile	H NMR (400 MHz, CHLOROFORM-d1) d ppm 1.56 (2 H), 1.81 (6 H), 2.06 (4 H), 2.78 (4 H), 3.04 (3 H), 3.61 (2 H), 7.35 (1 H), 7.47 (4 H), 7.58 (1 H), 8.18 (1 H), 8.30 (1 H), 9.13 (1 H).	LCMS (ESI+) calcd for C27H30N4 (M+H+) 411.25, found: 411.39
ER-890104	$C_{30}H_{42}N_6O_3$	534.7	0.2880	2.845	tert-butyl 4-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)piperidin-4-yl)piperazine-1-carboxylate			
ER-890105	$C_{30}H_{42}N_6O_3$	534.7	0.1020	7.002	tert-butyl 4-(4-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)piperazin-1-yl)piperidine-1-carboxylate	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.27 (d, *J*=6.41 Hz, 4 H) 1.40 (m, 1 H) 1.57 (s, 9 H) 1.80 (m, 2 H) 2.35 (m, 1 H) 2.50 - 2.74 (m, 12 H) 3.24 - 3.35 (m, 1 H) 3.41 (d, *J*=11.75 Hz, 1 H) 3.97 - 4.13 (m, 2 H) 7.09 (d, *J*=8.12 Hz, 1 H) 7.47 - 7.55 (m, 1 H) 8.05 (d, *J*=7.90 Hz, 1 H) 8.46 (dd, *J*=8.55, 1.71 Hz, 1 H) 9.08 (dd, *J*=4.06, 1.71 Hz, 1 H)	LCMS (ESI+) calcd for C30H42N6O3 (M+H+) 535.34, found: 535.49

FIG. 6OO

ER-890106	$C_{25}H_{34}N_6O$	434.6	0.0209		0.0973	5-((2R,6S)-2-methyl-6-((4-(piperazin-1-yl)piperidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.26 (d, *J*=6.20 Hz, 3 H) 1.44 - 1.62 (m, 2 H) 1.62 - 1.88 (m, 4 H) 1.95 - 2.07 (m, 1 H) 2.08 - 2.26 (m, 2 H) 2.38 - 2.47 (m, 1 H) 2.47 - 2.59 (m, 4 H) 2.59 - 2.72 (m, 2 H) 2.81 - 2.95 (m, 4 H) 3.03 - 3.15 (m, 1 H) 3.23 - 3.33 (m, 1 H) 3.33 - 3.50 (m, 1 H) 3.50 - 3.62 (m, 1 H) 3.94 - 4.11 (m, 2 H) 7.00 - 7.14 (m, 1 H) 7.50 (dd, *J*=8.55, 4.27 Hz, 1 H) 7.97 - 8.08 (m, 1 H) 8.45 (dd, *J*=8.55, 1.71 Hz, 1 H) 9.00 - 9.12 (m, 1 H)	LCMS (ESI+) calcd for C25H34N6O (M+H+) 435.28, found: 435.41
ER-890107	$C_{25}H_{34}N_6O$	434.6	0.2173	0.7285		5-((2R,6S)-2-methyl-6-((4-(piperidin-4-yl)piperazin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.26 (d, *J*=6.20 Hz, 3 H) 1.39 (qd, *J*=12.03, 4.06 Hz, 2 H) 1.82 (m, 2 H) 2.32 (tt, *J*=11.43, 3.63 Hz, 1 H) 2.48 (d, *J*=6.20 Hz, 1 H) 2.44 - 2.77 (m, 5 H) 3.13 - 3.16 (m, 2 H) 3.29 (dt, *J*=11.70, 1.95 Hz, 1 H) 3.36 - 3.48 (m, 1 H) 3.95 - 4.15 (m, 2 H) 7.09 (d, *J*=7.90 Hz, 1 H) 7.51 (dd, *J*=8.55, 4.27 Hz, 1 H) 8.04 (d, *J*=7.90 Hz, 1 H) 8.46 (dd, *J*=8.55, 1.71 Hz, 1 H) 9.08 (dd, *J*=4.06, 1.71 Hz, 1 H)	LCMS (ESI+) calcd for C25H34N6O (M+H+) 435.28, found: 435.41
ER-890108	$C_{24}H_{32}N_6O$	420.6	0.1570	> 2.0		5-((2R,6S)-2-methyl-6-((3-(4-methylpiperazin-1-yl)azetidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.11 - 1.30 (m, 3 H) 1.35 - 1.46 (m, 1 H) 2.04 (s, 1 H) 2.45 (br. s., 1 H) 2.55 - 2.81 (m, 3 H) 2.87 - 3.03 (m, 6 H) 3.05 - 3.15 (m, 1 H) 3.20 (br. s., 1 H) 3.29 - 3.41 (m, 3 H) 3.42 - 3.67 (m, 3 H) 4.07 (br. s., 1 H) 4.10 - 4.23 (m, 1 H) 4.90 (br. s., 1 H) 7.23 (d, *J*=8.20 Hz, 2 H) 7.61 (dd, *J*=8.50, 4.10 Hz, 1 H) 8.12 (d, *J*=7.91 Hz, 1 H) 8.34 (br. s., 2 H) 8.55 - 8.78 (m, 1 H) 8.90 - 9.04 (m, 1 H)
ER-890112	$C_{26}H_{35}N_5O$	433.6	0.0290	0.103		5-((2S,6R)-2-((4,4'-bipiperidin]-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, DICHLOROMETHANE-d_2) d ppm 1.19 - 1.41 (m, 6 H) 1.47 - 1.62 (m, 4 H) 1.76 - 1.89 (m, 5 H) 2.42 - 2.54 (m, 2 H) 2.59 - 2.66 (m, 2 H) 2.71 - 2.82 (m, 3 H) 2.90 - 2.96 (m, 1 H) 3.24 - 3.40 (m, 6 H) 3.61 (d, *J*=12.01 Hz, 1 H) 3.98 - 4.06 (m, 1 H) 4.36 (dd, *J*=9.96, 7.62 Hz, 1 H) 5.30 - 5.31 (m, 1 H) 7.05 (d, *J*=7.91 Hz, 1 H) 7.52 (dd, *J*=8.50, 4.10 Hz, 1 H) 8.01 (d, *J*=7.91 Hz, 1 H) 8.36 (s, 3 H) 8.47 (dd, *J*=8.50, 1.46 Hz, 1 H) 9.00 - 9.02 (m, 1 H)
ER-890113	$C_{28}H_{37}N_5O_2$	475.6	0.1200	> 2.0		5-((2S,6R)-2-((1'-acetyl-[4,4'-bipiperidin]-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	

FIG. 6PP

ER-890114	 $C_{27}H_{37}N_5O$	447.6	0.0045	0.0665	5-((2R,6S)-2-methyl-6-((1'-methyl-[4,4'-bipiperidin]-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.27 (d, J=6.15 Hz, 3 H) 1.49 (br. s., 3 H) 1.55 (s, 2 H) 1.59 (s, 1 H) 1.86 (s, 1 H) 1.99 (s, 2 H) 2.33 (s, 3 H) 2.51 - 2.79 (m, 3 H) 2.82 (s, 2 H) 2.90 - 3.08 (m, 3 H) 3.10 - 3.26 (m, 2 H) 3.26 - 3.33 (m, 2 H) 3.39 (d, J=12.60 Hz, 2 H) 3.50 (d, J=10.84 Hz, 2 H) 3.57 - 3.78 (m, 2 H) 4.12 (d, J=6.15 Hz, 1 H) 4.43 (br. s., 2 H) 4.52 - 4.68 (m, 1 H) 4.77 - 5.03 (m, 6 H) 7.16 - 7.42 (m, 3 H) 7.58 - 7.79 (m, 2 H) 8.14 (d, J=7.91 Hz, 1 H) 8.30 (br. s., 2 H) 8.64 (dd, J=8.50, 1.47 Hz, 2 H) 8.97 (dd, J=4.39, 1.46 Hz, 2 H)	
ER-890119	 $C_{23}H_{30}N_6O$	406.5	0.0110	0.141	5-((2R,6S)-2-methyl-6-((3-(piperazin-1-yl)azetidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.25 (d, J=6.45 Hz, 3 H) 2.52 - 2.78 (m, 6 H) 3.01 - 3.25 (m, 4 H) 3.29 - 3.53 (m, 5 H) 3.97 - 4.16 (m, 3 H) 4.16 - 4.44 (m, 4 H) 7.23 (d, J=8.20 Hz, 1 H) 7.61 (dd, J=8.50, 4.39 Hz, 1 H) 8.05 - 8.21 (m, 2 H) 8.60 (dd, J=8.50, 1.76 Hz, 2 H) 8.89 - 9.11 (m, 1 H)	
ER-890120	 $C_{25}H_{32}N_6O_2$	448.6	0.1340	> 2.0	5-((2S,6R)-2-((3-(4-acetylpiperazin-1-yl)azetidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.24 (d, J=6.15 Hz, 3 H) 2.00 (s, 1 H) 2.06 (s, 3 H) 2.31 - 2.41 (m, 4 H) 2.61 - 2.74 (m, 2 H) 3.21 - 3.25 (m, 1 H) 3.29 - 3.39 (m, 3 H) 3.52 - 3.60 (m, 4 H) 3.89 - 3.98 (m, 2 H) 4.04 - 4.09 (m, 1 H) 4.14 - 4.22 (m, 3 H) 4.85 (s, 5 H) 7.23 (d, J=7.91 Hz, 1 H) 7.61 (dd, J=8.50, 4.39 Hz, 1 H) 8.12 (d, J=7.91 Hz, 1 H) 8.32 (s, 2 H) 8.58 - 8.62 (m, 1 H) 8.95 (dd, J=4.10, 1.76 Hz, 1 H)	
ER-890121	 $C_{30}H_{41}N_5O_2$	503.7	0.2420	> 2.0	5-((2S,6R)-2-((1'-isobutyryl-[4,4'-bipiperidin]-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 0.98 - 1.24 (m, 6 H) 1.29 (d, J=6.15 Hz, 2 H) 1.48 (br. s., 1 H) 1.51 - 1.69 (m, 2 H) 1.70 - 1.95 (m, 2 H) 1.95 - 2.18 (m, 2 H) 2.33 (s, 1 H) 2.43 - 2.63 (m, 1 H) 2.63 - 2.83 (m, 2 H) 2.87 - 3.13 (m, 3 H) 3.17 - 3.34 (m, 3 H) 3.34 - 3.53 (m, 2 H) 3.67 (d, J=11.43 Hz, 2 H) 4.04 - 4.26 (m, 2 H) 4.43 (br. s., 1 H) 4.59 (d, J=12.31 Hz, 1 H) 4.87 (s, 3 H) 7.15 - 7.42 (m, 2 H) 7.59 - 7.81 (m, 1 H) 8.15 (d, J=7.91 Hz, 1 H) 8.25 (s, 1 H) 8.59 - 8.80 (m, 1 H) 8.94 - 9.16 (m, 1 H)	
ER-890122	 $C_{30}H_{34}N_6O_2$	510.6	0.0600	6.11	5-((2S,6R)-2-((3-(4-benzoylpiperazin-1-yl)azetidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.26 (d, J=6.15 Hz, 3 H) 2.34 (br. s., 2 H) 2.46 (br. s., 2 H) 2.54 - 2.80 (m, 2 H) 2.94 - 3.22 (m, 2 H) 3.23 - 3.44 (m, 4 H) 3.48 (br. s., 2 H) 3.61 - 3.88 (m, 4 H) 4.00 - 4.22 (m, 3 H) 4.82 - 5.05 (m, 3 H) 7.25 (d, J=7.91 Hz, 1 H) 7.35 - 7.55 (m, 3 H) 7.55 - 7.79 (m, 2 H) 8.02 - 8.28 (m, 1 H) 8.42 (s, 1 H) 8.52 - 8.80 (m, 2 H) 8.92 - 9.11 (m, 1 H)	

SUBSTITUTE SHEET (RULE 26)

FIG. 6QQ

ER-890142	$C_{33}H_{39}N_5O_2$	537.7	0.0880	1.271	5-((2S,6R)-2-((1'-benzoyl-[4,4'-bipiperidin]-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.21 (br. s., 2 H) 1.24 - 1.37 (m, 3 H) 1.40 - 1.67 (m, 4 H) 1.71 (d, J=13.48 Hz, 1 H) 1.88 (br. s., 1 H) 1.93 - 2.15 (m, 2 H) 2.31 (s, 1 H) 2.62 - 2.89 (m, 3 H) 2.90 - 3.14 (m, 3 H) 3.15 - 3.32 (m, 3 H) 3.33 - 3.53 (m, 2 H) 3.55 - 3.81 (m, 3 H) 4.07 - 4.20 (m, 1 H) 4.29 - 4.56 (m, 1 H) 4.68 (d, J=9.67 Hz, 1 H) 4.87 (d, J=0.59 Hz, 2 H) 7.09 - 7.31 (m, 2 H) 7.33 - 7.49 (m, 4 H) 7.51 - 7.69 (m, 2 H) 7.84 - 8.06 (m, 1 H) 8.13 (dd, J=7.91, 0.88 Hz, 1 H) 8.31 (d, J=0.88 Hz, 1 H) 8.49 - 8.70 (m, 1 H) 8.90 - 8.99 (m, 1 H)	LCMS (ESI+) calcd for C26H36N6O (M+H+) 449.30, found: 449.4
ER-890186	$C_{26}H_{36}N_6O$	448.6	0.0135	1.3615	5-((2R,6S)-2-methyl-6-((4-(1-methylpiperidin-4-yl)piperazin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-d) d ppm 1.26 (d, J=6.20 Hz, 3 H) 1.48 - 1.66 (m, 2 H) 1.66 - 1.85 (m, 4 H) 1.85 - 2.00 (m, 2 H) 2.15 - 2.32 (m, 4 H) 2.37 - 2.74 (m, 12 H) 2.90 (d, J=11.86, 1.98 Hz, 1 H) 3.35 - 3.48 (m, 1 H) 3.92 - 4.15 (m, 2 H) 7.08 (d, J=8.12 Hz, 1 H) 7.50 (dd, J=8.55, 4.27 Hz, 1 H) 8.04 (d, J=7.90 Hz, 1 H) 8.45 (dd, J=8.65, 1.82 Hz, 1 H) 9.08 (dd, J=4.06, 1.71 Hz, 1 H)	LCMS (ESI+) calcd for C27H36N6O2 (M+H+) 477.29, found: 477.39
ER-890187	$C_{27}H_{36}N_6O_2$	476.6	0.0870	> 2.0	5-((2S,6R)-2-((4-(1-acetylpiperidin-4-yl)piperazin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-d) d ppm 1.26 (d, J=6.20 Hz, 3 H) 1.31 - 1.50 (m, 2 H) 1.79 - 1.95 (m, 2 H) 2.09 (s, 3 H) 2.42 - 2.71 (m, 12 H) 2.95 - 3.12 (m, 1 H) 3.29 (d, J=11.75 Hz, 1 H) 3.41 (dd, J=11.96, 2.14 Hz, 1 H) 3.78 - 3.90 (m, 1 H) 3.94 - 4.16 (m, 2 H) 4.57 - 4.69 (m, 1 H) 7.09 (d, J=7.90 Hz, 1 H) 7.51 (dd, J=8.55, 4.27 Hz, 1 H) 8.04 (d, J=7.90 Hz, 1 H) 8.45 (dd, J=8.55, 1.71 Hz, 1 H) 9.08 (dd, J=4.17, 1.60 Hz, 1 H)	LCMS (ESI+) calcd for C29H40N6O2 (M+H+)505.32, found: 505.44
ER-890188	$C_{29}H_{40}N_6O_2$	504.7	0.0870	> 2.0	5-((2S,6R)-2-((4-(1-isobutyryl)piperidin-4-yl)piperazin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-d) d ppm 1.06 - 1.20 (m, 6 H) 1.26 (d, J=6.20 Hz, 3 H) 1.32 - 1.52 (m, 2 H) 1.89 (t, J=14.31 Hz, 2 H) 2.41 - 2.71 (m, 12 H) 2.74 - 2.88 (m, 1 H) 3.02 (t, J=12.39 Hz, 1 H) 3.29 (d, J=11.75 Hz, 1 H) 3.41 (d, J=11.96 Hz, 1 H) 3.90 - 4.18 (m, 3 H) 4.67 (d, J=12.60 Hz, 1 H) 7.09 (d, J=8.12 Hz, 1 H) 7.51 (dd, J=8.55, 4.06 Hz, 1 H) 8.04 (d, J=7.90 Hz, 1 H) 8.45 (dd, J=8.55, 1.50 Hz, 1 H) 9.08 (dd, J=4.06, 1.50 Hz, 1 H)	LCMS (ESI+) calcd for C32H38N6O2 (M+H+) 539.31, found: 539.42
ER-890189	$C_{32}H_{38}N_6O_2$	538.7	0.1100	> 2.0	5-((2S,6R)-2-((4-(1-benzoylpiperidin-4-yl)piperazin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-d) d ppm 1.26 (d, J=6.20 Hz, 3 H) 1.32 - 1.53 (m, 2 H) 1.80 -1.96 (m, 2 H) 2.03 (s, 1 H) 2.36 - 2.74 (m, 12 H) 2.79 (m, 1 H) 3.00 (m, 1 H) 3.29 (d, J=11.75 Hz, 1 H) 3.41 (d, J=11.75 Hz, 1 H) 3.80 (br. s., 1 H) 3.94 - 4.16 (m, 2 H) 4.74 (br. s., 1 H) 7.09 (d, J=8.12 Hz, 1 H) 7.34 - 7.45 (m, 5 H) 7.51 (dd, J=8.55, 4.27 Hz, 1 H) 8.04 (d, J=7.90 Hz, 1 H) 8.46 (dd, J=8.55, 1.50 Hz, 1 H) 9.08 (dd, J=4.27, 1.50 Hz, 1 H)	LCMS (ESI+) calcd for C32H38N6O2 (M+H+) 539.31, found: 539.42

FIG. 6RR

ER-890190	$C_{27}H_{36}N_6O_2$	476.6	0.2150	> 30	5-((2S,6R)-2-((3-(4-isobutyryl)piperazin-1-yl)azetidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile		
ER-890219	$C_{27}H_{36}N_6O_2$	476.6	0.1110	6.44	5-((2S,6R)-2-((4-(4-acetylpiperazin-1-yl)piperidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	H NMR (400 MHz, CHLOROFORM-d1) d ppm 1.27 (3 H), 1.67 (3 H), 1.86 (3 H), 2.09 (3 H), 2.59 (10 H), 3.28 (2 H), 3.47 (4 H), 3.64 (2 H), 4.07 (1 H), 7.08 (1 H), 7.54 (1 H), 8.03 (1 H), 8.50 (1 H), 9.08 (1 H).	LCMS (ESI+) calcd for C29H40N6O2 (M+H+) 505.32, found: 505.49
ER-890221	$C_{29}H_{40}N_6O_2$	504.7	0.1240	3.82	5-((2S,6R)-2-((4-(4-isobutyrylpiperazin-1-yl)piperidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	H NMR (400 MHz, CHLOROFORM-d1) d ppm 1.12 (6 H), 1.26 (3 H), 1.72 (2 H), 1.85 (2 H), 2.35 (3 H), 2.55 (4 H), 2.64 (4 H), 2.78 (1 H), 3.06 (1 H), 3.28 (2 H), 3.43 (1 H), 3.53 (2 H), 3.64 (2 H), 4.05 (1 H), 4.25 (1 H), 7.07 (1 H), 7.52 (1 H), 8.03 (1 H), 8.48 (1 H), 9.07 (1 H).	LCMS (ESI+) calcd for C32H38N6O2 (M+H+) 539.31, found: 539.52
ER-890222	$C_{32}H_{38}N_6O_2$	538.7	0.1130	3.05	5-((2S,6R)-2-((4-(4-benzoylpiperazin-1-yl)piperidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	H NMR (400 MHz, METHANOL-d4) d ppm 1.22 (3 H), 1.57 (2 H), 1.86 (2 H), 2.12 (2 H), 2.31 (1 H), 2.45 (1 H), 2.53 (2 H), 2.64 (4 H), 1.22 (1 H), 3.17 (1 H), 3.33 (4 H), 3.38 (1 H), 3.44 (1 H), 3.76 (1 H), 4.04 (1 H), 4.12 (1 H), 7.22 (1 H), 7.39 (2 H), 7.45 (3 H), 7.62 (1 H), 8.12 (1 H), 8.63 (1 H), 8.96 (1 H).	LCMS (ESI+) calcd for C26H36N6O (M+H+) 449.30, found: 449.41
ER-890223	$C_{26}H_{36}N_6O$	448.6	0.0137	0.181	5-((2R,6S)-2-methyl-6-((4-(4-methylpiperazin-1-yl)piperidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	H NMR (400 MHz, CHLOROFORM-d1) d ppm 1.24 (3 H), 1.58 (2 H), 1.83 (2 H), 2.07 (1 H), 2.18 (1 H), 2.36 (4 H), 2.47 (1 H), 2.64 (11 H), 2.95 (1 H), 3.13 (1 H), 3.27 (1 H), 3.41 (1 H), 4.01 (1 H), 4.07 (1 H), 7.06 (1 H), 7.49 (1 H), 8.02 (1 H), 8.44 (1 H), 9.05 (1 H).	

FIG. 6SS

ER-890223	$C_{26}H_{39}Cl_3N_6O$	558.0	0.0010	0.083	5-((2R,6S)-2-methyl-6-((4-(4-methylpiperazin-1-yl)piperidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile trihydrochloride	^{1}H NMR (400 MHz, DMSO-d_6) d ppm 1.12 - 1.28 (m, 3 H) 2.09 - 2.43 (m, 4 H) 2.60 - 2.77 (m, 2 H) 2.83 (br. s., 3 H) 2.97 - 3.21 (m, 4 H) 3.23 - 3.53 (m, 8 H) 3.67 (br. s., 4 H) 3.74 - 4.01 (m, 6 H) 4.02 - 4.17 (m, 1 H) 4.48 (t, J=9.08 Hz, 1 H) 7.27 (m, J=8.12 Hz, 1 H) 7.70 (dd, J=8.65, 4.17 Hz, 1 H) 8.29 (m, J=8.12 Hz, 1 H) 8.62 (dd, J=8.55, 1.50 Hz, 1 H) 9.07 (dd, J=4.27, 1.50 Hz, 1 H) 10.70 (br. s., 1 H)	LCMS (ESI+) calcd for C26H36N6O (M+H+) 449.30, found: 449.41
ER-890244	$C_{27}H_{30}N_4$	410.562	0.0225	0.0465	5-(4-([1,4'-bipiperidin]-1'-ylmethyl)phenyl)quinoline-8-carbonitrile	H NMR (400 MHz, METHANOL-d4) d ppm 1.50 (2 H), 1.65 (6 H), 1.91 (2 H), 2.08 (2 H), 2.44 (1 H), 2.67 (4 H), 3.04 (2 H), 3.61 (2 H), 7.45 (2 H), 7.52 (2 H), 8.26 (1 H), 8.37 (1 H), 9.01 (1 H).	LCMS (ESI+) calcd for C27H30N4 (M+H+) 411.25, found: 411.35
ER-890250	$C_{27}H_{37}N_5O$	447.6	2.0590	0.841	5-((2S,6R)-2-([1,4'-bipiperidin]-1'-ylmethyl)-6-methylmorpholino)-2-methylquinoline-8-carbonitrile	H NMR (400 MHz, DMSO-d6) d ppm 1.14 (3 H), 1.35 (4 H), 1.44 (4 H), 1.63 (2 H), 1.94 (3 H), 2.39 (6 H), 2.48 (1 H), 2.55 (1 H), 2.58 (1 H), 2.61 (1 H), 2.71 (3 H), 2.84 (1 H), 3.00 (1 H), 3.98 (2 H), 7.13 (1 H), 7.54 (1 H), 8.17 (1 H), 8.42 (1 H).	LCMS (ESI+) calcd for C27H37N5O (M+H+) 448.30, found: 448.4
ER-890252	$C_{22}H_{27}N_5O_2$	393.5	0.0330	> 10.0	N-((R)-1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)pyrrolidin-3-yl)acetamide	H NMR (400 MHz, CHLOROFORM-d1) d ppm 1.25 (3 H), 1.80 (1 H), 1.94 (2 H), 1.99 (1 H), 2.35 (1 H), 2.65 (3 H), 2.78 (1 H), 2.84 (1 H), 2.92 (1 H), 3.13 (1 H), 3.27 (2 H), 3.37 (1 H), 4.04 (1 H), 4.22 (1 H), 4.59 (1 H), 6.84 (1 H), 7.05 (1 H), 7.50 (1 H), 7.99 (1 H), 8.43 (1 H), 9.03 (1 H).	LCMS (ESI+) calcd for C22H27N5O2 (M+H+) 394.22, found: 394.22
ER-890253	$C_{24}H_{31}N_5O_2$	421.5	0.1610	> 10.0	N-((R)-1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)pyrrolidin-3-yl)isobutyramide	H NMR (400 MHz, CHLOROFORM-d1) d ppm 1.09 (6 H), 1.24 (3 H), 1.60 (1 H), 2.28 (2 H), 2.38 (1 H), 2.66 (6 H), 3.01 (1 H), 3.27 (1 H), 3.37 (1 H), 4.03 (2 H), 4.42 (1 H), 6.02 (1 H), 7.05 (1 H), 7.50 (1 H), 7.98 (1 H), 8.43 (1 H), 9.02 (1 H).	LCMS (ESI+) calcd for C24H31N5O2 (M+H+) 422.25, found: 422.31

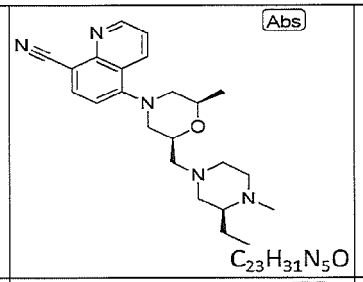
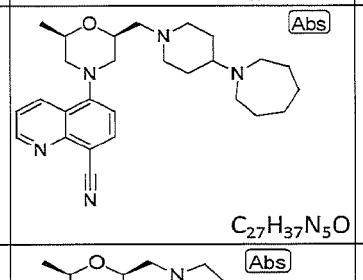
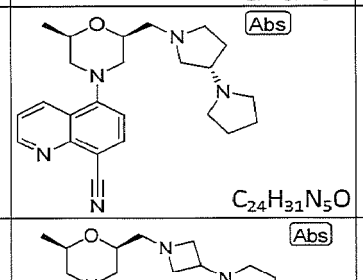
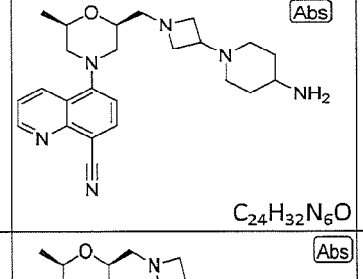
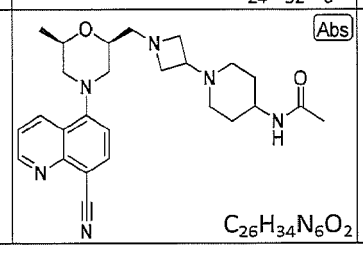
FIG. 6TT

ER-890311	Abs $C_{25}H_{33}N_5O$	419.6	0.1409	> 10.0? 4.736	5-((2R,6S)-2-methyl-6-(((S)-3-(piperidin-1-yl)pyrrolidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.21 - 1.49 (m, 3 H) 1.66 (br. s., 2 H) 1.75 - 1.89 (m, 2 H) 1.94 (br. s., 1 H) 2.01 - 2.25 (m, 1 H) 2.36 (s, 3 H) 2.55 - 2.78 (m, 2 H) 2.83 - 2.98 (m, 2 H) 3.06 (s, 1 H) 3.19 (d, J=6.45 Hz, 3 H) 3.25 - 3.35 (m, 2 H) 3.37 (s, 1 H) 3.39 (s, 1 H) 3.59 - 3.88 (m, 2 H) 3.94 - 4.15 (m, 1 H) 4.18 (br. s., 1 H) 4.81 - 5.07 (m, 4 H) 7.24 (t, J=7.91 Hz, 2 H) 7.56 - 7.80 (m, 2 H) 8.08 (s, 1 H) 8.15 (d, J=7.91 Hz, 1 H) 8.42 - 8.67 (m, 1 H) 8.83 - 9.10 (m, 1 H)	
ER-890311	Abs $C_{25}H_{35}Cl_2N_5O$	492.6	0.0218	6.541	5-((2R,6S)-2-methyl-6-(((S)-3-(piperidin-1-yl)pyrrolidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile dihydrochloride			
ER-890342	Abs $C_{23}H_{29}N_5O_2$	407.5	0.0710	> 2.0	5-((2R,6S)-2-methyl-6-((3-morpholinoazetidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.25 (d, J=6.15 Hz, 4 H) 2.32 (s, 3 H) 2.38 (br. s., 4 H) 2.62 - 2.74 (m, 2 H) 3.29 - 3.39 (m, 5 H) 3.65 - 3.70 (m, 5 H) 3.99 - 4.09 (m, 3 H) 4.20 - 4.27 (m, 2 H) 4.81 - 4.85 (m, 7 H) 7.16 - 7.24 (m, 2 H) 7.59 - 7.63 (m, 1 H) 7.67 (d, J=8.20 Hz, 1 H) 8.12 (d, J=8.20 Hz, 1 H) 8.19 (br. s., 1 H) 8.61 (dd, J=8.50, 1.47 Hz, 1 H) 8.94 - 8.96 (m, 1 H)	
ER-890343	Abs $C_{24}H_{31}N_5O$	405.5	0.0082	5.241	5-((2R,6S)-2-methyl-6-((3-((S)-2-methylpyrrolidin-1-yl)azetidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile			
ER-890344	Abs $C_{21}H_{27}N_5O$	365.5	0.0180	> 2.0	5-((2R,6S)-2-methyl-6-(((S)-2-methylpiperazin-1-yl)methyl)morpholino)quinoline-8-carbonitrile			

FIG. 6UU

ER-890345	$C_{22}H_{29}N_5O$	379.5	0.0180	> 2.0	5-((2S,6R)-2-(((S)-2,4-dimethylpiperazin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile		
ER-890346	$C_{22}H_{29}N_5O$	379.5	0.0240	> 2.0	5-((2S,6R)-2-(((R)-3,4-dimethylpiperazin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile		
ER-890831	$C_{22}H_{29}N_5O$	379.5	0.0051	> 10.0	5-((2S,6R)-2-(((S)-3,4-dimethylpiperazin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 1.05 (3 H, d) 1.17 - 1.22 (3 H, m) 1.89 - 1.98 (1 H, m) 2.27 (4 H, s) 2.30 - 2.37 (2 H, m) 2.39 - 2.46 (1 H, m) 2.46 - 2.67 (3 H, m) 2.72 - 2.81 (1 H, m) 2.82 - 2.97 (2 H, m) 3.26 - 3.40 (2 H, m) 3.92 - 4.05 (1 H, m) 4.07 - 4.18 (1 H, m) 7.09 - 7.19 (1 H, m) 7.50 - 7.59 (1 H, m) 7.99 - 8.08 (1 H, m) 8.49 - 8.61 (1 H, m) 8.84 - 8.99 (1 H, m)	LCMS (ESI+) calcd for C22 H29 N5 O (M+H+) 380.5, found 380.3
ER-890963	$C_{22}H_{29}N_5O$	379.5	0.0005	> 10.0	5-((2S,6R)-2-(((S)-3-ethylpiperazin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 0.96 (3 H, t) 1.20 (3 H, d) 1.52 - 1.64 (2 H, m) 2.10 - 2.23 (1 H, m) 2.29 - 2.43 (1 H, m) 2.52 - 2.63 (3 H, m) 2.66 - 2.74 (1 H, m) 3.00 - 3.18 (4 H, m) 3.29 - 3.42 (2 H, m) 3.98 - 4.07 (1 H, m) 4.08 - 4.20 (1 H, m) 7.15 - 7.23 (1 H, m) 7.54 - 7.64 (1 H, m) 8.07 - 8.15 (1 H, m) 8.43 - 8.53 (1 H, m) 8.57 - 8.66 (1 H, m) 8.88 - 8.99 (1 H, m)	LCMS (ESI+) calcd for C22 H29 N5 O (M+H+) 380.5, found 380.2
ER-890963	$C_{22}H_{31}Cl_2N_5O$	452.4	0.0085	> 10.0	5-((2S,6R)-2-(((S)-3-ethylpiperazin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile dihydrochloride		

FIG. 6VV

ER-890964	 $C_{23}H_{31}N_5O$	393.5	0.0009	> 10.0	5-((2S,6R)-2-(((S)-3-ethyl-4-methylpiperazin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 0.86 (t, *J*=7.62 Hz, 2 H) 1.18 - 1.40 (m, 4 H) 1.48 - 1.76 (m, 2 H) 1.82 - 2.10 (m, 2 H) 2.15 (s, 1 H) 2.19 - 2.33 (m, 4 H) 2.44 (dd, *J*=12.89, 6.45 Hz, 1 H) 2.54 (dd, *J*=12.89, 5.57 Hz, 1 H) 2.59 - 2.79 (m, 3 H) 2.83 - 3.06 (m, 1 H) 3.26 (dt, *J*=11.72, 2.05 Hz, 1 H) 3.34 - 3.56 (m, 2 H) 3.89 - 4.13 (m, 2 H) 7.06 (d, *J*=7.91 Hz, 1 H) 7.24 (s, 1 H) 7.48 (dd, *J*=8.50, 4.39 Hz, 1 H) 8.02 (d, *J*=8.20 Hz, 1 H) 8.32 - 8.49 (m, 1 H) 9.05 (dd, *J*=4.10, 1.76 Hz, 1 H)	
ER-891084	 $C_{27}H_{37}N_5O$	447.6	0.0034	0.0362	5-((2S,6R)-2-((4-(azepan-1-yl)piperidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.16 - 1.31 (m, 3 H) 1.71 (br. s., 4 H) 1.74 - 1.85 (m, 2 H) 1.88 (br. s., 3 H) 2.02 (d, *J*=9.38 Hz, 2 H) 2.10 - 2.30 (m, 2 H) 2.35 (s, 1 H) 2.45 - 2.74 (m, 4 H) 3.12 - 3.41 (m, 9 H) 3.99 - 4.23 (m, 2 H) 4.87 (s, 4 H) 7.17 - 7.42 (m, 2 H) 7.57 - 7.84 (m, 2 H) 8.13 (d, *J*=7.91 Hz, 1 H) 8.52 (s, 1 H) 8.57 - 8.79 (m, 2 H) 8.82 - 9.07 (m, 2 H)	
ER-891090	 $C_{24}H_{31}N_5O$	405.5	0.0081	1.262	5-((2S,6R)-2-((S)-[1,3'-bipyrrolidin]-1'-ylmethyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.16 - 1.31 (m, 3 H) 1.71 (br. s., 4 H) 1.74 - 1.85 (m, 2 H) 1.88 (br. s., 3 H) 2.02 (d, *J*=9.38 Hz, 2 H) 2.10 - 2.30 (m, 2 H) 2.35 (s, 1 H) 2.45 - 2.74 (m, 4 H) 3.12 - 3.41 (m, 9 H) 3.99 - 4.23 (m, 2 H) 4.87 (s, 4 H) 7.17 - 7.42 (m, 2 H) 7.57 - 7.84 (m, 2 H) 8.13 (d, *J*=7.91 Hz, 1 H) 8.52 (s, 1 H) 8.57 - 8.79 (m, 2 H) 8.82 - 9.07 (m, 2 H)	
ER-892253	 $C_{24}H_{32}N_6O$	420.6	0.0664	> 10.0	5-((2S,6R)-2-((3-(4-aminopiperidin-1-yl)azetidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.27 (d, *J*=6.45 Hz, 2 H) 1.57 - 1.77 (m, 2 H) 2.03 (br. s., 3 H) 2.59 - 2.82 (m, 2 H) 2.92 (d, *J*=9.96 Hz, 2 H) 3.12 (d, *J*=12.01 Hz, 1 H) 3.25 - 3.49 (m, 5 H) 4.00 - 4.17 (m, 2 H) 4.17 - 4.30 (m, 1 H) 4.34 (d, *J*=7.03 Hz, 2 H) 7.25 (d, *J*=7.91 Hz, 1 H) 7.58 - 7.84 (m, 1 H) 8.06 (s, 1 H) 8.15 (d, *J*=8.20 Hz, 1 H) 8.63 (dd, *J*=8.50, 1.76 Hz, 1 H) 8.95 - 9.07 (m, 1 H)	
ER-892254	 $C_{26}H_{34}N_6O_2$	462.6	0.0696	> 10.0	N-(1-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)azetidin-3-yl)piperidin-4-yl)acetamide	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.24 (d, *J*=6.15 Hz, 2 H) 1.35 - 1.58 (m, 2 H) 1.89 (s, 3 H) 1.95 - 2.19 (m, 2 H) 2.51 - 2.76 (m, 2 H) 2.82 (s, 1 H) 2.79 (s, 1 H) 3.22 (br. s., 1 H) 3.29 - 3.48 (m, 3 H) 3.50 - 3.77 (m, 1 H) 3.80 - 4.01 (m, 2 H) 4.01 - 4.12 (m, 1 H) 4.13 - 4.36 (m, 2 H) 7.23 (d, *J*=7.91 Hz, 1 H) 7.56 - 7.76 (m, 1 H) 8.12 (d, *J*=8.20 Hz, 1 H) 8.26 (br. s., 1 H) 8.61 (dd, *J*=8.50, 1.76 Hz, 1 H) 8.95 (dd, *J*=4.10, 1.47 Hz, 1 H)	

SUBSTITUTE SHEET (RULE 26)

FIG. 6WW

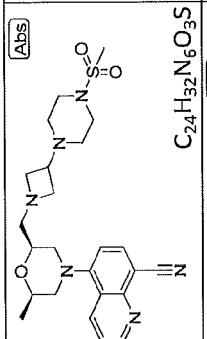
ER-892256	 $C_{24}H_{32}N_6O_3S$	484.6	0.3116	> 10.0	5-((2R,6S)-2-methyl-6-((3-(4-(methylsulfonyl)piperazin-1-yl)azetidin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	
ER-893881	$C_{23}H_{29}N_5O_2$	407.5	0.0055	> 10.0	5-((2S,6R)-2-((3-((S)-3-hydroxypyrrolidin-1-yl)azetidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	
ER-893926	$C_{27}H_{33}N_7O_2$	487.6	0.0123	5.9	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)piperidin-4-yl)-1,3-dimethyl-1H-pyrazole-4-carboxamide	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.27 (d, J=6.15 Hz, 3 H) 1.76 - 2.01 (m, 2 H) 2.05 - 2.28 (m, 2 H) 2.36 (s, 3 H) 2.51 - 2.77 (m, 2 H) 3.02 - 3.25 (m, 4 H) 3.29 - 3.47 (m, 2 H) 3.50 - 3.70 (m, 2 H) 3.75 (s, 1 H) 3.80 (s, 2 H) 3.94 - 4.17 (m, 2 H) 4.41 (br. s., 1 H) 7.23 (d, J=7.91 Hz, 1 H) 7.55 - 7.72 (m, 1 H) 7.94 (s, 1 H) 8.12 (d, J=7.91 Hz, 1 H) 8.24 (s, 2 H) 8.49 - 8.66 (m, 1 H) 8.79 - 9.07 (m, 1 H)
ER-893927	$C_{30}H_{38}N_8O_2$	542.7	0.0910	>10.0	N-(1-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)azetidin-3-yl)piperidin-4-yl)-1,3-dimethyl-1H-pyrazole-4-carboxamide	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.25 (d, J=6.15 Hz, 2 H) 1.47 - 1.66 (m, 2 H) 1.96 (s, 1 H) 1.93 (s, 1 H) 2.00 - 2.21 (m, 2 H) 2.35 (s, 3 H) 2.57 - 2.79 (m, 2 H) 2.88 (s, 1 H) 2.85 (s, 1 H) 3.29 - 3.57 (m, 3 H) 3.78 (s, 3 H) 3.86 - 4.04 (m, 2 H) 4.08 (d, J=5.57 Hz, 1 H) 4.21 (br. s., 3 H) 7.23 (d, J=7.91 Hz, 1 H) 7.42 - 7.69 (m, 2 H) 7.76 (d, J=7.62 Hz, 1 H) 7.90 (s, 1 H) 8.13 (d, J=8.20 Hz, 1 H) 8.24 (br. s., 2 H) 8.61 (d, J=8.79 Hz, 2 H) 8.91 - 9.11 (m, 1 H)
ER-893948	$C_{22}H_{29}N_5O_3S$	443.6	0.0995	>10.0	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)piperidin-4-yl)methanesulfonamide	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.25 (d, J=6.15 Hz, 3 H) 1.38 (br. s., 1 H) 1.78 (s, 1 H) 1.74 (s, 1 H) 1.83 - 1.96 (m, 1 H) 2.04 (br. s., 1 H) 2.10 (br. s., 2 H) 2.52 - 2.76 (m, 2 H) 2.77 - 2.92 (m, 2 H) 2.92 - 3.06 (m, 3 H) 3.12 (s, 1 H) 3.29 - 3.55 (m, 3 H) 4.09 (br. s., 1 H) 4.28 (br. s., 2 H) 4.74 (br. s., 1 H) 4.85 (s, 6 H) 5.46 (s, 1 H) 7.23 (d, J=7.91 Hz, 1 H) 7.61 (dd, J=8.50, 4.10 Hz, 1 H) 8.12 (d, J=7.91 Hz, 1 H) 8.34 (br. s., 2 H) 8.47 - 8.73 (m, 1 H) 8.80 - 9.00 (m, 1 H)

FIG. 6XX

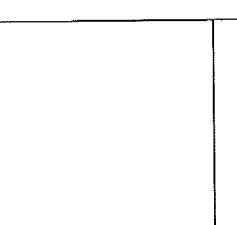
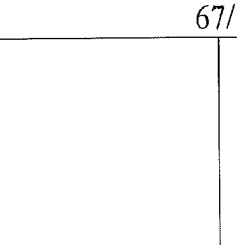
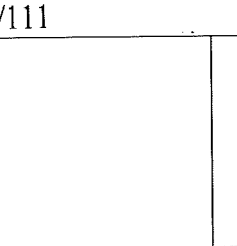
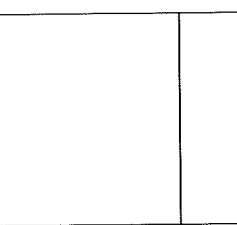
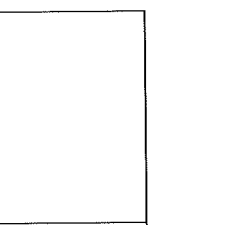
ER-894149	 $C_{27}H_{31}N_5O_3S$	505.6	0.1130	9.9	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)piperidin-4-yl)benzenesulfonamide	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.23 (d, J=6.15 Hz, 3 H) 1.58 - 1.85 (m, 2 H) 1.85 - 1.98 (m, 2 H) 2.04 (s, 1 H) 2.54 - 2.72 (m, 2 H) 2.88 (s, 1 H) 3.02 (s, 1 H) 2.98 (s, 1 H) 3.05 - 3.25 (m, 2 H) 3.29 - 3.52 (m, 4 H) 3.96 - 4.16 (m, 1 H) 4.31 (br. s., 1 H) 7.21 (d, J=7.91 Hz, 1 H) 7.28 - 7.42 (m, 1 H) 7.51 - 7.69 (m, 3 H) 7.70 - 7.82 (m, 1 H) 7.82 - 7.98 (m, 1 H) 8.11 (d, J=8.20 Hz, 1 H) 8.23 (br. s., 1 H) 8.59 (dd, J=8.50, 1.76 Hz, 1 H) 8.89 - 9.11 (m, 1 H)
ER-894150	 $C_{27}H_{30}FN_5O_3S$	523.6	0.1275	>10.0	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)piperidin-4-yl)-4-fluorobenzenesulfonamide	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.26 (d, J=6.45 Hz, 2 H) 1.64 - 1.90 (m, 2 H) 1.90 - 2.11 (m, 2 H) 2.54 - 2.74 (m, 2 H) 2.90 (br. s., 1 H) 2.99 - 3.24 (m, 3 H) 3.25 - 3.53 (m, 4 H) 3.96 - 4.22 (m, 1 H) 4.24 - 4.42 (m, 1 H) 7.06 - 7.17 (m, 1 H) 7.23 (d, J=7.91 Hz, 1 H) 7.26 - 7.45 (m, 1 H) 7.61 (dd, J=8.50, 4.39 Hz, 1 H) 7.73 - 7.88 (m, 1 H) 7.89 - 8.03 (m, 1 H) 8.13 (d, J=7.91 Hz, 1 H) 8.23 (br. s., 1 H) 8.62 (dd, J=8.79, 1.47 Hz, 1 H) 8.93 - 9.11 (m, 1 H)
ER-894151	 $C_{19}H_{23}N_5O$	337.4	0.0052	11.46	5-((2S,6R)-2-((3-aminoazetidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.08 - 1.30 (m, 4 H) 2.56 - 2.82 (m, 3 H) 2.83 - 3.00 (m, 2 H) 3.00 - 3.19 (m, 1 H) 3.21 - 3.43 (m, 5 H) 3.44 - 3.59 (m, 2 H) 3.59 - 3.78 (m, 1 H) 3.79 - 3.99 (m, 2 H) 4.00 - 4.11 (m, 2 H) 4.14 (br. s., 1 H) 4.52 - 4.67 (m, 1 H) 4.75 - 4.90 (m, 5 H) 7.17 - 7.31 (m, 1 H) 7.44 - 7.68 (m, 2 H) 8.07 (s, 1 H) 8.15 (d, J=8.20 Hz, 1 H) 8.41 (s, 2 H) 8.51 - 8.80 (m, 2 H) 8.81 - 9.04 (m, 1 H)
ER-894152	 $C_{21}H_{25}N_5O_2$	379.5	0.0740	>10.0	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)azetidin-3-yl)acetamide	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.03 - 1.30 (m, 3 H) 1.94 (s, 2 H) 2.57 - 2.79 (m, 2 H) 3.00 - 3.25 (m, 2 H) 3.29 - 3.57 (m, 2 H) 3.79 (br. s., 2 H) 4.05 (br. s., 1 H) 4.17 (d, J=8.79 Hz, 2 H) 4.49 (s, 1 H) 4.47 (s, 1 H) 7.22 (d, J=8.20 Hz, 1 H) 7.55 - 7.80 (m, 1 H) 8.12 (d, J=7.91 Hz, 1 H) 8.39 (br. s., 1 H) 8.60 (d, J=8.50 Hz, 2 H) 8.95 (d, J=2.64 Hz, 1 H)
ER-894153	 $C_{26}H_{26}FN_5O_2$	459.5	0.1210	>10.0	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)azetidin-3-yl)-4-fluorobenzamide	

FIG. 6YY

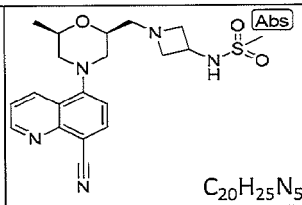
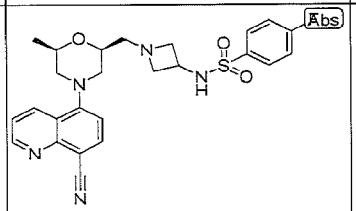
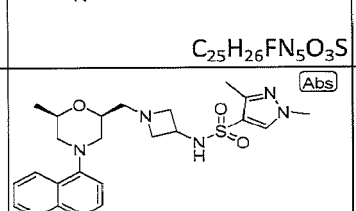
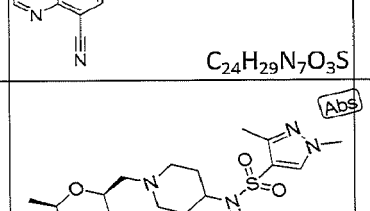
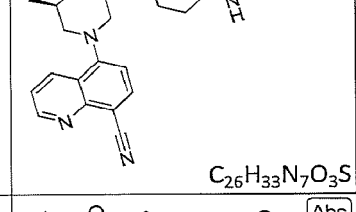
ER-894154	 $C_{20}H_{25}N_5O_3S$	415.5	0.1710	>10.0	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)azetidin-3-yl)methanesulfonamide	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.27 (d, J=6.15 Hz, 3 H) 2.52 - 2.78 (m, 2 H) 2.96 (s, 2 H) 3.01 - 3.21 (m, 2 H) 3.23 - 3.42 (m, 4 H) 3.55 - 3.77 (m, 2 H) 3.91 - 4.17 (m, 2 H) 4.17 - 4.40 (m, 3 H) 4.88 (s, 3 H) 7.25 (d, J=7.91 Hz, 1 H) 7.57 - 7.84 (m, 1 H) 8.15 (d, J=7.91 Hz, 1 H) 8.30 (br. s., 1 H) 8.64 (dd, J=8.50, 1.76 Hz, 1 H) 8.93 - 9.17 (m, 1 H)	
ER-894155	 $C_{25}H_{26}FN_5O_3S$	495.6	0.2820	>10.0	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)azetidin-3-yl)-4-fluorobenzenesulfonamide	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.09 - 1.33 (m, 2 H) 1.44 (s, 1 H) 2.02 (s, 1 H) 2.54 - 2.76 (m, 1 H) 2.95 - 3.23 (m, 1 H) 3.23 - 3.50 (m, 2 H) 3.62 - 3.80 (m, 1 H) 3.97 - 4.24 (m, 3 H) 6.94 - 7.16 (m, 1 H) 7.20 (d, J=8.20 Hz, 1 H) 7.26 - 7.46 (m, 1 H) 7.60 (dd, J=8.50, 4.39 Hz, 1 H) 7.73 - 8.01 (m, 1 H) 8.11 (d, J=7.91 Hz, 1 H) 8.23 (br. s., 1 H) 8.50 - 8.65 (m, 1 H) 8.95 (dd, J=4.39, 1.76 Hz, 1 H)	
ER-894159	 $C_{24}H_{29}N_7O_3S$	495.6	0.1780	>10.0	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)azetidin-3-yl)-1,3-dimethyl-1H-pyrazole-4-sulfonamide	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.20 (d, J=6.45 Hz, 3 H) 2.32 (s, 3 H) 2.45 (s, 1 H) 2.52 - 2.71 (m, 2 H) 2.93 - 3.14 (m, 2 H) 3.29 - 3.46 (m, 2 H) 3.60 (br. s., 2 H) 3.69 - 3.89 (m, 3 H) 3.91 - 4.12 (m, 4 H) 7.20 (d, J=8.20 Hz, 1 H) 7.46 - 7.69 (m, 1 H) 7.98 (s, 1 H) 8.10 (d, J=8.20 Hz, 1 H) 8.26 (br. s., 2 H) 8.43 - 8.63 (m, 1 H) 8.77 - 8.97 (m, 1 H)	
ER-894160	 $C_{26}H_{33}N_7O_3S$	523.7	0.1990	>10.0	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)piperidin-4-yl)-1,3-dimethyl-1H-pyrazole-4-sulfonamide	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.14 - 1.41 (m, 4 H) 1.73 - 1.95 (m, 2 H) 1.95 - 2.17 (m, 3 H) 2.20 - 2.37 (m, 4 H) 2.44 (d, J=18.75 Hz, 1 H) 2.59 - 2.79 (m, 3 H) 2.97 (s, 1 H) 3.06 - 3.25 (m, 4 H) 3.29 - 3.44 (m, 3 H) 3.50 (br. s., 2 H) 3.57 - 3.75 (m, 3 H) 3.77 - 3.88 (m, 3 H) 3.94 (s, 1 H) 3.98 - 4.23 (m, 2 H) 4.24 - 4.45 (m, 2 H) 7.22 (d, J=7.91 Hz, 1 H) 7.60 (dd, J=8.50, 4.39 Hz, 2 H) 7.68 (s, 1 H) 7.83 - 8.02 (m, 1 H) 8.08 - 8.25 (m, 2 H) 8.37 (s, 1 H) 8.49 - 8.78 (m, 2 H) 8.95 (dd, J=4.39, 1.76 Hz, 1 H)	
ER-894206	 $C_{23}H_{29}N_5O_2$	407.5	0.0197	>10.0	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)azetidin-3-yl)isobutyramide		

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FIG. 6ZZ

ER-894472	$C_{21}H_{25}N_5O_2$	379.5	0.1210	>10.0	5-((2R,6S)-2-methyl-6-(((S)-2-methyl-5-oxopiperazin-1-yl)methyl)morpholino)quinoline-8-carbonitrile		
ER-894473	$C_{21}H_{25}N_5O_2$	379.5	0.4060	>10.0	5-((2R,6S)-2-methyl-6-(((R)-2-methyl-5-oxopiperazin-1-yl)methyl)morpholino)quinoline-8-carbonitrile		LCMS (ESI+) calcd. for: C21H25N5O2 (M+H+): 380.2, found 380.2
ER-894483	$C_{21}H_{25}N_5O_2$	379.5	0.1350	>10.0	5-((2R,6S)-2-methyl-6-(((R)-2-methyl-3-oxopiperazin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	1H NMR (CD3OD) d ppm 8.93 (dd, 1H), 8.61 (dd, 1H), 8.10 (d, 1H), 7.60 (dd, 1H), 7.20 (d, 1H), 4.05 (m, 2H), 3.39-3.07)overlapping multiplets, 6H), 2.28-2.57 (overlapping multiplets 5H), 1.32 (d, 3H), 1.21 (d, 3H)	LCMS (ESI+) calcd. for: C21H25N5O2 (M+H+): 380.2, found 380.2
ER-894484	$C_{21}H_{25}N_5O_2$	379.5	0.1470	>10.0	5-((2R,6S)-2-methyl-6-(((S)-2-methyl-3-oxopiperazin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	1H NMR (CD3OD) d ppm 8.92 (dd, 1H), 8.59 (dd, 1H), 8.10 (d, 1H), 7.59 (dd, 1H), 7.20 (d, 1H), 4.13-4.01 (m, 2H), 3.45-3.13 (overlapping m, 6H), 2.28-2.57 (overlapping multiplets 5H), 1.30 (d, 3H), 1.21 (d, 3H)	LCMS (ESI+) calcd. for: C21H25N5O2 (M+H+): 380.2, found 380.2
ER-894504	$C_{22}H_{29}N_5O$	393.5	0.0170	>10.0	5-((2R,6S)-2-methyl-6-((2,4,5-trimethylpiperazin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	1H NMR (CD3OD) d ppm 8.92 (dd, 1H), 8.58 (m, 1H), 8.07 (d, 1H), 7.58 (m, 1H), 7.17 (m, 1H), 4.11 (m, 1H), 4.02 (m, 1H), 3.40 (m, 1H), 3.31 (m, 1H), 3.27 (m, 1H), 3.00-2.77 (overlapping multiplets (2H, 2.72-2.54 (overlapping multiplets, 2H), 2.44-2.32 (m, 1H), 2.24 (d, 3H), 2.20 (m, 2H) 2.04 (m, 2H), 1.20 (m, 3H), 1.03 (m, 6H)	LCMS (ESI+) calcd. for: C23H31N5O (M+H+): 394.3, found 394.3

FIG. 6AAA

ER-894505	$C_{22}H_{29}N_5O$	393.5	0.0040	>10.0	5-((2R,6S)-2-methyl-6-((2,3,4-trimethylpiperazin-1-yl)methyl)morpholino)quinoline-8-carbonitrile	1H NMR (CD3OD) d ppm 8.93 (dd, 1H), 8.59 (m, 1H), 8.10 (d, 1H), 7.59 (m, 1H), 7.20 (dd, 1H), 4.13-4.01 (m, 2H), 3.45-3.31 (overlapping m, 4H), 3.04-2.572.35 (overlapping multiplets 4H), 2.26 (s, 3H), 2.20 (m, 1H), 1.80 (m, 1H), 1.20 (m, 3H), 1.21 (m, 6H)	LCMS (ESI+) calcd. for: C23H31N5O (M+H+): 394.3, found 394.4
ER-894544	$C_{27}H_{29}N_5O_2$	455.6	0.0430	6.2	N-((R)-1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)pyrrolidin-3-yl)benzamide	H NMR (400 MHz, CHLOROFORM-d1) d ppm 1.26 (3 H), 2.37 (2 H), 2.70 (6 H), 3.07 (1 H), 3.28 (1 H), 3.39 (1 H), 3.46 (1H), 4.04 (2 H), 4.66 (1 H), 6.70 (1 H), 7.07 (1 H), 7.39 (2 H), 7.49 (2 H), 7.75 (2 H), 8.04 (1 H), 8.45 (1 H), 9.03 (1 H).	LCMS (ESI+) calcd for C27H29N5O2 (M+H+) 456.24, found 456.39
ER-894545	$C_{22}H_{29}N_5O$	379.5	0.0050	>10.0	5-((2S,6R)-2-(((R)-3-(dimethylamino)pyrrolidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	H NMR (400 MHz, METHANOL-d4) d ppm 1.25 (3 H), 1.91 (1 H), 2.18 (1 H), 2.57 (6 H), 2.65 (1 H), 2.75 (2 H), 2.85 (1 H), 2.97 (1 H), 3.35 (2 H), 3.4 (3 H), 4.11 (2 H), 7.23 (1 H), 7.63 (1 H), 8.14 (1 H), 8.52 (1 H), 8.64 (1 H), 8.97 (1 H).	LCMS (ESI+) calcd for C22H29N5O (M+H+) 380.24, found 380.25
ER-894546	$C_{22}H_{27}N_5O_2$	393.5	0.0222	>10.0	N-((S)-1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)pyrrolidin-3-yl)acetamide	H NMR (400 MHz, CHLOROFORM-d1) d ppm 1.25 (3 H), 1.80 (1 H), 1.94 (2 H), 1.99 (1 H), 2.35 (1 H), 2.65 (3 H), 2.78 (1 H), 2.84 (1 H), 2.92 (1 H), 3.13 (1 H), 3.27 (2 H), 3.37 (1 H), 4.04 (1 H), 4.22 (1 H), 4.59 (1 H), 6.84 (1 H), 7.05 (1 H), 7.50 (1 H), 7.99 (1 H), 8.43 (1 H), 9.03 (1 H).	LCMS (ESI+) calcd for C22H27N5O2 (M+H+) 394.22, found 394.27
ER-894547	$C_{24}H_{31}N_5O_2$	421.5	0.0272	>10.0	N-((S)-1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)pyrrolidin-3-yl)isobutyramide	H NMR (400 MHz, CHLOROFORM-d1) d ppm 1.09 (6 H), 1.24 (3 H), 1.60 (1 H), 2.28 (2 H), 2.38 (1 H), 2.66 (6 H), 3.01 (1 H), 3.27 (1 H), 3.37 (1 H), 4.03 (2 H), 4.42 (1 H), 6.02 (1 H), 7.05 (1 H), 7.50 (1 H), 7.98 (1 H), 8.43 (1 H), 9.02 (1 H).	LCMS (ESI+) calcd for C24H31N5O2 (M+H+) 422.25, found 422.28

FIG. 6BBB

ER-894548	Abs $C_{27}H_{29}N_5O_2$	455.6	0.0213	4.33	N-((S)-1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)pyrrolidin-3-yl)benzamide	H NMR (400 MHz, CHLOROFORM-d1) d ppm 1.26 (3 H), 2.37 (2 H), 2.70 (6 H), 3.07 (1 H), 3.28 (1 H), 3.39 (1 H), 3.46 (1H), 4.04 (2 H), 4.66 (1 H), 6.70 (1 H), 7.07 (1 H), 7.39 (2 H), 7.49 (2 H), 7.75 (2 H), 8.04 (1 H), 8.45 (1 H), 9.03 (1 H).	LCMS (ESI+) calcd for C27H29N5O2 (M+H+) 456.24, found 456.18
ER-894549	Abs $C_{22}H_{29}N_5O$	379.5	0.0044	3.9	5-((2S,6R)-2-(((S)-3-(dimethylamino)pyrrolidin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	H NMR (400 MHz, METHANOL-d4) d ppm 1.25 (3 H), 1.91 (1 H), 2.18 (1 H), 2.57 (6 H), 2.65 (1 H), 2.75 (2 H), 2.85 (1 H), 2.97 (1 H), 3.35 (2 H), 3.4 (3 H), 4.11 (2 H), 7.23 (1 H), 7.63 (1 H), 8.14 (1 H), 8.52 (1 H), 8.64 (1 H), 8.97 (1 H).	LCMS (ESI+) calcd for C22H29N5O (M+H+) 380.24, found 380.26
ER-894550	Abs $C_{18}H_{20}N_4O_2$	324.38	0.0347	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-ethyl-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, METHANOL-d4) d ppm 1.10 (2 H), 1.29 (3 H), 2.71 (2 H), 3.23 (3 H), 3.35 (1 H), 3.67 (1 H), 4.11 (1 H), 4.42 (1 H), 7.23 (1 H), 7.62 (1 H), 8.12 (1 H), 8.64 (1 H), 8.95 (1 H).	LCMS (ESI+) calcd for C18H20N4O2 (M+H+): 325.16 ; Found: 325.27
ER-894551	Abs $C_{19}H_{22}N_4O_2$	338.41	0.0350	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-isopropyl-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, METHANOL-d4) d ppm 1.15 (6 H), 1.3 (3 H), 2.71 (2 H), 3.35 (1 H), 3.65 (1 H), 4.07 (2 H), 4.40 (1 H), 7.22 (1 H), 7.47 (1 H), 7.61 (1 H), 8.10 (1 H), 8.62 (1 H), 8.94 (1 H).	LCMS (ESI+) calcd for C19H22N4O (M+H+): 339.18 ; Found: 339.17
ER-894552	Abs $C_{20}H_{19}N_5O_2$	361.4	0.1010	> 10.0	5-((2R,6R)-2-methyl-6-((pyrazin-2-yloxy)methyl)morpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, CDCl3) d ppm 1.31 (3 H), 2.73 (1 H), 2.93 (1 H), 3.33 (1 H), 3.46 (1 H), 4.13 (1 H), 4.34 (1 H), 4.43 (1 H), 4.52 (1 H), 7.13 (1 H), 7.54 (1 H), 8.07 (1 H), 8.09 (1 H), 8.16 (1 H), 8.30 (1 H), 8.49 (1 H), 9.09 (1 H).	LCMS (ESI+) calcd for C20 H19 N5 O2 (M+H+) 362.4, found 362.3

FIG. 6CCC

ER-894594	$C_{26}H_{27}N_5O_2$	441.5	0.0690	>10.0	N-(1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)azetidin-3-yl)benzamide		
ER-894655	$C_{22}H_{31}Cl_2N_5O$	452.4	0.0010	14.72	5-((2S,6R)-2-((3,3-dimethylpiperazin-1-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile dihydrochloride		
ER-894656	$C_{23}H_{33}Cl_2N_5O$	466.5	0.0008	10.63	5-((2R,6S)-2-methyl-6-((3,3,4-trimethylpiperazin-1-yl)methyl)morpholino)quinoline-8-carbonitrile dihydrochloride	1H NMR (DMSO d6) d PPm 9.007 (m, 1H), 8.56 9 m, 1H), 8.22 9d, 1H), 7.64 (dd, 1H), 7.19 (m, 1H), 4.13 (br s, 8H, 3.39 (m, 1H), 2.62 (m, 2H, 2.45 (s, 3H), 1.35 (br s, 6H), 1.14 (d, 3H)	LCMS (ESI+) calcd. for: C23H31N5O (M+H+): 393.3; found 393.4
ER-895194	$C_{16}H_{15}N_3O_3$	297.30	> 10.0	> 10.0	5-((2R,6R)-2-formyl-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, CDCl3-d) d ppm 1.34 (3 H, d) 2.71 - 2.77 (1 H, m) 2.85 - 2.91 (1 H, m) 3.24 (1H, d) 3.74 (1 H, d) 4.04 - 4.09 (1 H, m) 4.50 (1 H, d) 7.08 (1 H, d) 7.53 (1 H, d) 8.01 (1 H, d) 8.51 (1 H, d) 9.05 (1 H, s)	
ER-895200	$C_{17}H_{19}N_3O_2$	297.4	0.1772	> 10.0	5-((2R,6R)-2-((R)-1-hydroxyethyl)-6-methylmorpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 1.21 - 1.28 (m, 9 H) 1.59 (br. s., 4 H) 2.04 (br. s., 1 H) 2.58 - 2.65 (m, 1 H) 2.84 - 2.91 (m, 1 H) 3.28 (s, 1 H) 3.25 (s, 1 H) 3.38 (s, 1 H) 3.35 (s, 1 H) 3.78 (d, *J*=10.55 Hz, 1 H) 3.94 (br. s., 1 H) 4.04 (d, *J*=6.45 Hz, 1 H) 7.08 (d, *J*=7.91 Hz, 1 H) 7.24 (s, 1 H) 7.49 (dd, *J*=8.79, 4.10 Hz, 1 H) 8.02 (d, *J*=7.91 Hz, 1 H) 8.43 (d, *J*=8.50 Hz, 1 H) 9.05 (d, *J*=2.64 Hz, 1 H)	

FIG. 6DDD

ER-895204	$C_{24}H_{31}N_5O_2$	421.5	0.0017	> 10.0	1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)-N-ethylpiperidine-4-carboxamide	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.00 - 1.18 (m, 2 H) 1.26 (d, J=6.15 Hz, 3 H) 1.96 (br. s., 3 H) 2.32 (s, 2 H) 2.42 (br. s., 1 H) 2.53 - 2.82 (m, 2 H) 2.93 (br. s., 2 H) 3.03 - 3.25 (m, 3 H) 3.39 (s, 1 H) 3.36 (s, 1 H) 3.57 (s, 1 H) 3.55 (s, 1 H) 4.11 (br. s., 1 H) 4.35 (br. s., 1 H) 4.89 (br. s., 1 H) 7.13 - 7.41 (m, 2 H) 7.56 - 7.72 (m, 2 H) 8.12 (d, J=7.91 Hz, 1 H) 8.34 (br. s., 1 H) 8.48 - 8.74 (m, 1 H) 8.95 (dd, J=4.10, 1.76 Hz, 1 H)	
ER-895204	$C_{24}H_{32}ClN_5O_2$	458.0	0.0270	> 10.0	1-(((2S,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholin-2-yl)methyl)-N-ethylpiperidine-4-carboxamide hydrochloride		
ER-895310	$C_{17}H_{19}N_3O_2$	297.4	0.3940	> 10.0	5-((2R,6R)-2-((S)-1-hydroxyethyl)-6-methylmorpholino)quinoline-8-carbonitrile		
ER-895324	$C_{21}H_{20}N_4O_2$	360.4	0.0280	> 10.0	5-((2R,6R)-2-methyl-6-((pyridin-2-yloxy)methyl)morpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, CDCl3-d) d ppm 1.29 (3 H, d) 2.63 - 2.75 (1 H, m) 2.80 - 2.94 (1 H, m) 3.22 - 3.36 (1 H, m) 3.40 - 3.50 (1 H, m) 4.01 - 4.14 (1 H, m) 4.27 - 4.40 (2 H, m) 4.44 - 4.56 (1 H, m) 6.73 - 6.80 (1 H, m) 6.83 - 6.91 (1 H, m) 7.08 (1 H, d) 7.41 - 7.52 (1 H, m) 7.53 - 7.61 (1 H, m) 7.98 - 8.06 (1 H, m) 8.08 - 8.16 (1 H, m) 8.39 - 8.53 (1 H, m) 8.99 - 9.11 (1 H, m)	LCMS (ESI+) calcd for C21 H20 N4 O2 (M+H+) 361.4, found 361.5
ER-895325	$C_{20}H_{19}N_5O_2$	361.4	0.0345	5.351	5-((2R,6R)-2-methyl-6-((pyrimidin-2-yloxy)methyl)morpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, CDCl3-d) d ppm 1.19 - 1.33 (3 H, d) 2.65 - 2.74 (1 H, m) 2.89 - 2.99 (1 H, m) 3.26 - 3.33 (1 H, m) 3.45 - 3.52 (1 H, m) 4.04 - 4.13 (1 H, m) 4.30 - 4.37 (1 H, m) 4.37 - 4.44 (1 H, m) 4.48 - 4.59 (1 H, m) 6.88 - 7.00 (1 H, m) 7.05 - 7.15 (1 H, m) 7.45 - 7.54 (1 H, m) 7.97 - 8.08 (1 H, m) 8.42 - 8.57 (3 H, m) 8.99 - 9.12 (1 H, m)	LCMS (ESI+) calcd for C20 H19 N5 O2 (M+H+) 362.4, found 362.0

FIG. 6EEE

ER-895326	$C_{21}H_{21}N_5O_2$	375.4	0.0380	> 10.0	5-((2R,6R)-2-methyl-6-((R)-1-(pyrimidin-2-yloxy)ethyl)morpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, CDCl3-d) d ppm 1.25 (3 H, d) 1.46 (3 H, d) 2.61 - 2.70 (1 H, m) 2.74 - 2.89 (1 H, m) 3.18 - 3.31 (1 H, m) 3.47 - 3.59 (1 H, m) 3.95 - 4.11 (2 H, m) 5.16 - 5.31 (1 H, m) 6.85 - 6.95 (1 H, m) 7.00 - 7.12 (1 H, m) 7.45 - 7.56 (1 H, m) 7.94 - 8.06 (1 H, m) 8.41 - 8.52 (3 H, m) 8.98 - 9.09 (1 H, m)	LCMS (ESI+) calcd for C21 H21 N5 O2 (M+H+) 376.4, found 376.4
ER-895327	$C_{21}H_{21}N_5O_2$	375.4	0.1750	> 10.0	5-((2R,6R)-2-methyl-6-((S)-1-(pyrimidin-2-yloxy)ethyl)morpholino)quinoline-8-carbonitrile	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 0.84 - 0.88 (m, 1 H) 1.24 (d, *J*=6.15 Hz, 4 H) 1.43 (d, *J*=6.45 Hz, 4 H) 1.59 (s, 6 H) 2.62 - 2.69 (m, 1 H) 2.93 - 3.00 (m, 1 H) 3.27 (d, *J*=11.72 Hz, 1 H) 3.37 (d, *J*=11.43 Hz, 1 H) 4.00 - 4.07 (m, 1 H) 4.11 - 4.16 (m, 1 H) 5.34 - 5.40 (m, 1 H) 6.90 - 6.93 (m, 1 H) 7.07 (d, *J*=7.91 Hz, 1 H) 7.24 (s, 2 H) 7.48 (dd, *J*=8.50, 4.10 Hz, 1 H) 8.01 (d, *J*=7.91 Hz, 1 H) 8.40 - 8.44 (m, 1 H) 8.49 (d, *J*=4.98 Hz, 2 H) 9.03 - 9.06 (m, 1 H)	
ER-895412	$C_{21}H_{21}N_5O_2$	360.4	0.0961	> 10.0	5-((2R,6R)-2-((S)-hydroxy(pyridin-2-yl)methyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 1.10 - 1.20 (3 H, m) 2.59 - 2.70 (1 H, m) 2.81 - 2.91 (1 H, m) 3.37 - 3.45 (1 H, m) 3.93 - 4.03 (1 H, m) 4.16 - 4.28 (1 H, m) 4.56 - 4.62 (1 H, m) 4.70 - 4.78 (1 H, m) 7.13 - 7.22 (1 H, m) 7.25 - 7.34 (1 H, m) 7.49 - 7.59 (2 H, m) 7.75 - 7.85 (1 H, m) 8.03 - 8.14 (1 H, m) 8.44 - 8.57 (2 H, m) 8.86 - 8.94 (1 H, m)	LCMS (ESI+) calcd for C21 H20 N4 O2 (M+H+) 361.4, found 361.4
ER-895415	$C_{17}H_{17}N_3O_3$	311.34	0.2367	> 10.0	(2R,6R)-methyl 4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxylate	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 0.67 - 0.81 (m, 1 H) 0.86 (d, *J*=6.15 Hz, 4 H) 1.07 (s, 1 H) 2.24 (dd, *J*=12.01, 10.25 Hz, 2 H) 2.40 - 2.61 (m, 1 H) 2.79 (dt, *J*=11.87, 2.27 Hz, 2 H) 3.14 (dt, *J*=11.87, 2.42 Hz, 1 H) 3.45 - 3.67 (m, 1 H) 4.10 (dd, *J*=10.69, 2.49 Hz, 1 H) 6.62 (d, *J*=7.91 Hz, 1 H) 6.76 (s, 1 H) 7.05 (dd, *J*=8.50, 4.39 Hz, 1 H) 7.56 (d, *J*=7.91 Hz, 1 H) 7.97 (dd, *J*=8.50, 1.76 Hz, 1 H) 8.59 (dd, *J*=4.25, 1.61 Hz, 1 H)	
ER-895472	$C_{16}H_{16}N_4O_2$	296.33	0.0870	> 10.0	(6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, METHANOL-d4) d ppm 1.30 (3 H), 2.74 (2 H), 3.36 (1 H), 3.69 (1 H), 4.11 (2 H), 4.43 (1 H), 7.24 (1 H), 7.63 (1 H), 8.12 (1 H), 8.19 (1H), 8.64 (1 H), 8.95 (1 H).	LCMS (ESI+) calcd for C16H16N4O2 (M+H+): 297.13 ; Found: 297.27

FIG. 6FFF

ER-895473		$C_{22}H_{27}N_5O_2$	393.49	0.0530	> 10.0	5-((2R,6R)-2-((S)-3-ethylpiperazine-1-carbonyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) 1.06 (3 H), 1.25 (3 H), 1.64 (2 H), 2.67 (1 H), 2.96 (2 H), 3.11 (2 H), 3.36 (2 H), 3.47 (1 H), 4.18 (2 H), 4.40 (1 H), 4.56 (1 H), 4.80 (1H), 7.26 (1 H), 7.59 (1 H), 8.13 (1 H), 8.35 (1 H), 8.61 (1 H), 8.94 (1 H).	LCMS (ESI+) calcd for $C_{22}H_{27}N_5O_2$ (M+H+): 394.22 ; Found: 394.06
ER-895474		$C_{23}H_{20}F_2N_4O_2$	422.43	0.1030	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(3,4-difluorobenzyl)-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, METHANOL-d4) d ppm 1.31 (3 H), 2.74 (3 H), 3.36 (1 H), 3.69 (1 H), 4.11 (1 H), 4.36 (2 H), 4.5 (1 H), 7.19 (4 H), 7.62 (1 H), 8.11 (1 H), 8.64 (1 H), 8.95 (1 H).	LCMS (ESI+) calcd for $C_{23}H_{20}F_2N_4O_2$ (M+H+): 423.16 ; Found: 423.4
ER-895475		$C_{20}H_{23}N_5O_2$	365.43	0.0440	> 10.0	5-((2R,6R)-2-((S)-3-aminopyrrolidine-1-carbonyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 1.25 (1 H), 1.76 (1 H), 2.00 (1 H), 2.09 (2 H), 2.67 (2 H), 3.03 (2 H), 3.16 (1 H), 3.27 (1 H), 3.35 (2 H), 3.46 (2 H). 3.63 (2 H), 3.96 (1 H), 4.11 (1 H), 4.67 (1 H), 7.23 (1 H), 7.59 (1 H), 8.1 (1 H), 8.61 (1 H), 8.93(1 H).	LCMS (ESI+) calcd for $C_{20}H_{23}N_5O_2$ (M+H+): 366.19 ; Found: 366.39
ER-895476		$C_{19}H_{20}N_4O_2$	336.39	0.0370	> 10.0	5-((2R,6R)-2-(azetidine-1-carbonyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) d ppm 1.25 (3 H), 2.31 (2 H), 2.67 (1 H), 2.92 (1 H), 3.35 (1 H), 3.52 (1 H), 4.05 (3 H), 4.51 (3 H), 7.25 (1 H), 7.63 (1 H), 8.13 (1 H), 8.65 (1 H), 8.96 (1 H).	
ER-895477		$C_{26}H_{33}N_5O_2$	447.58	0.1110	> 10.0	5-((2R,6R)-2-[1,4'-bipiperidine]-1'-carbonyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) 1.25 (3 H), 1.53 (m, 3 H), 1.75 (m, 4 H), 1.98 (2 H), 2.13 (3 H), 2.69 (2 H), 3.06 (4 H), 3.44 (4 H), 4.14 (1 H), 4.38 (1 H), 4.64 (1 H), 7.27 (1 H), 7.61 (1 H), 8.13 (1 H), 8.63 (1 H), 8.95 (1 H).	LCMS (ESI+) calcd for $C_{26}H_{33}N_5O_2$ (M+H+): 448.26 ; Found: 448.5

FIG. 6GGG

ER-895478	$C_{19}H_{20}N_4O_2$	336.39	0.0110	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-cyclopropyl-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, METHANOL-d4) 0.55 (2 H), 0.72 (2 H), 0.86 (1 H), 1.28 (3 H), 2.71 (2 H), 3.34 (1 H), 3.64 (1 H), 4.08 (1 H), 4.41 (1 H), 7.73 (1 H), 7.62 (1 H), 7.83 (1 H), 8.12 (1 H), 8.63 (1 H), 8.95 (1 H).	LCMS (ESI+) calcd for C19H20N4O2 (M+H+): 337.16 ; Found: 336.98
ER-895479	$C_{19}H_{21}N_5O_2$	351.41	0.0030	> 10.0	5-((2R,6R)-2-(3-aminoazetidine-1-carbonyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, METHANOL-d4) 1.25 (3 H), 2.67 (1 H), 2.91 (1 H), 3.35 (1 H), 3.53 (1 H), 3.66 (1 H), 3.79 (1 H), 4.08 (2 H), 4.16 (2 H), 4.57 (3 H), 7.24 (1 H), 7.61 (1 H), 8.12 (1 H), 8.62 (1 H), 8.95 (1 H).	LCMS (ESI+) calcd for C19H21N5O2(M+H+): 352.17 ; Found: 352.34
ER-897383	$C_{18}H_{20}N_4O_3$	340.38	0.2965	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(2-hydroxyethyl)-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, CDCl3-d) d ppm 1.30 (3 H, d) 2.66 (1 H, s) 2.76 (1 H, s) 3.22 - 3.35 (1 H, m) 3.40 - 3.58 (3 H, m) 3.69 - 3.85 (4 H, m) 4.01 - 4.13 (1 H, m) 4.35 - 4.50 (1 H, m) 6.96 - 7.16 (1 H, m) 7.41 - 7.60 (1 H, m) 7.92 - 8.05 (1 H, m) 8.34 - 8.50 (1 H, m) 8.95 - 9.11 (1 H, m)	LCMS (ESI+) calcd for C18 H20 N4 O3 [M+H+] 341.2, found 341.2
ER-897385	$C_{19}H_{22}N_4O_3$	354.41	0.0483	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(2-methoxyethyl)-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, METHANOL-d4) d ppm 1.30 (3 H, d) 2.59 - 2.82 (2 H, m) 3.35 - 3.49 (8 H, m) 3.54 - 3.71 (1 H, m) 4.03 - 4.17 (1 H, m) 4.36 - 4.50 (1 H, m) 7.13 - 7.27 (1 H, m) 7.54 - 7.69 (1 H, m) 8.06 - 8.15 (1 H, m) 8.54 - 8.71 (1 H, m) 8.89 - 9.11 (1 H, m)	LCMS (ESI+) calcd for C19 H22 N4 O3 (M+H+) 355.4, found 355.2
ER-897445	$C_{19}H_{22}N_4O_3$	354.41	0.0440	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((R)-2-hydroxypropyl)-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, METHANOL-d4) d ppm 1.12 (3 H, d) 1.30 (3 H, d) 2.63 - 2.81 (2 H, m) 3.14 (1 H, dd) 3.24 - 3.31 (1 H, m) 3.36 (1 H, d) 3.68 (1 H, d) 3.74 - 3.88 (1 H, m) 4.00 - 4.18 (1 H, m) 4.47 (1 H, dd) 7.22 (1 H, d) 7.62 (1 H, dd) 8.10 (1 H, d) 8.57 - 8.69 (1 H, m) 8.84 - 9.04 (1 H, m)	LCMS (ESI+) calcd for C19 H22 N4 O3 (M+H+) 355.4, found 355.2

FIG. 6HHH

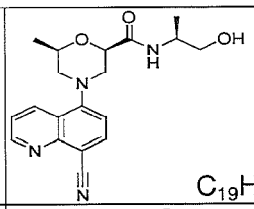
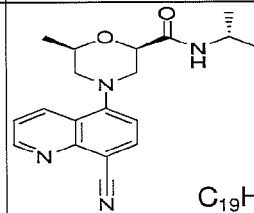
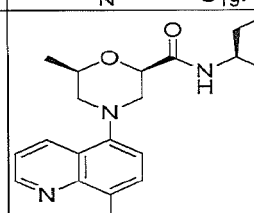
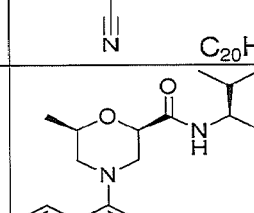
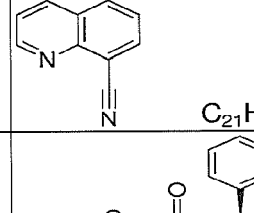
ER-897446	 $C_{19}H_{22}N_4O_3$	354.41	0.0255	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((S)-1-hydroxypropan-2-yl)-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, CDCl3-d) d ppm 1.22 (3 H, d) 1.31 (3 H, d) 1.92 - 2.28 (1 H, brs) 2.61 - 2.71 (1 H, m) 2.72 - 2.84 (1 H, m) 3.22 - 3.31 (1 H, m) 3.50 - 3.61 (1 H, m) 3.64 - 3.72 (1 H, m) 3.73 - 3.84 (1 H, m) 4.03 - 4.17 (2 H, m) 4.35 - 4.46 (1 H, m) 6.69 - 6.85 (1 H, m) 6.98 - 7.13 (1 H, m) 7.45 - 7.57 (1 H, m) 7.94 - 8.07 (1 H, m) 8.37 - 8.50 (1 H, m) 8.93 - 9.16 (1 H, m)	LCMS (ESI+) calcd for C19 H22 N4 O3 (M+H+) 355.4, found 355.2
ER-897447	 $C_{19}H_{22}N_4O_3$	354.41	0.0920	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((R)-1-hydroxypropan-2-yl)-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, METHANOL-d4) d ppm 1.12 (3 H, s) 1.30 (3 H, d) 2.62 - 2.82 (3 H, m) 3.34 (1 H, d) 3.61 - 3.72 (1 H, m) 3.92 - 4.17 (3 H, m) 4.44 (1 H, dd) 7.14 - 7.29 (1 H, m) 7.56 - 7.66 (1 H, m) 8.00 - 8.15 (1 H, m) 8.55 - 8.66 (1 H, m) 8.86 - 8.98 (1 H, m)	LCMS (ESI+) calcd for C19 H22 N4 O3 (M+H+) 355.4, found: 355.2
ER-897827	 $C_{20}H_{24}N_4O_3$	368.43	0.0200	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((S)-1-hydroxybutan-2-yl)-6-methylmorpholine-2-carboxamide	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 0.99 - 1.12 (m, 1 H) 1.17 (t, *J*=7.47 Hz, 4 H) 1.38 - 1.48 (m, 2 H) 1.52 (d, *J*=6.15 Hz, 4 H) 1.66 - 1.92 (m, 3 H) 2.80 - 3.04 (m, 3 H) 3.48 (dt, *J*=11.94, 2.09 Hz, 1 H) 3.81 (dd, *J*=11.13, 6.15 Hz, 1 H) 3.91 (dd, *J*=11.13, 3.52 Hz, 1 H) 3.98 (dt, *J*=12.01, 2.34 Hz, 1 H) 4.02 - 4.13 (m, 1 H) 4.21 - 4.36 (m, 2 H) 4.63 (dd, *J*=10.84, 2.64 Hz, 1 H) 6.97 (d, *J*=8.20 Hz, 1 H) 7.25 (s, 1 H) 7.71 (dd, *J*=8.64, 4.25 Hz, 1 H) 8.21 (d, *J*=7.91 Hz, 1 H) 8.66 (dd, *J*=8.50, 1.76 Hz, 1 H) 9.24 (dd, *J*=4.25, 1.61 Hz, 1 H)	
ER-897828	 $C_{21}H_{26}N_4O_3$	382.46	0.0190	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((S)-1-hydroxy-3-methylbutan-2-yl)-6-methylmorpholine-2-carboxamide	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 0.79 - 0.87 (m, 1 H) 0.95 (dd, *J*=10.40, 6.89 Hz, 7 H) 1.16 - 1.27 (m, 2 H) 1.30 (d, *J*=6.15 Hz, 4 H) 1.85 - 2.03 (m, 2 H) 2.65 (dd, *J*=12.01, 10.25 Hz, 1 H) 2.75 (dd, *J*=12.01, 10.84 Hz, 2 H) 3.25 (dt, *J*=12.01, 2.05 Hz, 1 H) 3.55 - 3.80 (m, 5 H) 3.98 - 4.15 (m, 1 H) 4.43 (dd, *J*=10.55, 2.64 Hz, 1 H) 6.82 (d, *J*=8.50 Hz, 1 H) 7.03 (d, *J*=7.91 Hz, 1 H) 7.49 (dd, *J*=8.64, 4.25 Hz, 1 H) 7.97 (d, *J*=7.91 Hz, 1 H) 8.43 (dd, *J*=8.50, 1.76 Hz, 1 H) 9.01 (dd, *J*=4.39, 1.76 Hz, 1 H)	
ER-897829	 $C_{24}H_{24}N_4O_3$	416.48	0.0550	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((S)-2-hydroxy-1-phenylethyl)-6-methylmorpholine-2-carboxamide	^{1}H NMR (400 MHz, CHLOROFORM-*d*) d ppm 0.76 - 0.89 (m, 1 H) 1.14 - 1.41 (m, 6 H) 2.68 (dd, *J*=11.87, 10.40 Hz, 1 H) 2.79 - 2.86 (m, 1 H) 3.23 - 3.31 (m, 1 H) 3.76 - 3.82 (m, 1 H) 3.89 (d, *J*=4.98 Hz, 2 H) 4.03 - 4.13 (m, 1 H) 4.43 (dd, *J*=10.84, 2.64 Hz, 1 H) 5.07 (dt, *J*=7.47, 5.05 Hz, 1 H) 7.05 (d, *J*=7.91 Hz, 1 H) 7.21 - 7.39 (m, 7 H) 7.48 (dd, *J*=8.64, 4.25 Hz, 1 H) 7.99 (d, *J*=8.20 Hz, 1 H) 8.43 (dd, *J*=8.64, 1.61 Hz, 1 H) 9.01 (dd, *J*=4.25, 1.61 Hz, 1 H)	

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FIG. 6III

ER-897830	$C_{24}H_{24}N_4O_3$	416.48	0.1050	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((R)-2-hydroxy-1-phenylethyl)-6-methylmorpholine-2-carboxamide	^{1}H NMR (400 MHz, CHLOROFORM-*d*') d ppm 0.79 - 0.88 (m, 1 H) 1.15 - 1.37 (m, 6 H) 2.63 - 2.77 (m, 2 H) 3.28 (dt, *J*=12.01, 2.05 Hz, 1 H) 3.76 (dt, *J*=12.01, 2.20 Hz, 1 H) 3.92 (d, *J*=4.98 Hz, 3 H) 4.06 - 4.15 (m, 1 H) 4.49 (dd, *J*=10.55, 2.64 Hz, 1 H) 5.09 (dt, *J*=7.62, 4.98 Hz, 1 H) 7.04 (d, *J*=8.20 Hz, 1 H) 7.23 - 7.40 (m, 7 H) 7.50 (dd, *J*=8.50, 4.39 Hz, 1 H) 7.99 (d, *J*=7.91 Hz, 1 H) 8.45 (dd, *J*=8.50, 1.76 Hz, 1 H) 9.03 (dd, *J*=4.25, 1.61 Hz, 1 H)	LCMS (ESI+) calcd for C20H24N4O3 (M+H+): 369.19, found: 369.18
ER-897922	$C_{20}H_{24}N_4O_3$	368.43	0.0280	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(2-hydroxybutyl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C20H24N4O3 (M+H+): 369.19, found: 369.18
ER-897923	$C_{20}H_{24}N_4O_3$	368.43	0.0520	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(2-ethoxyethyl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C20H24N4O3 (M+H+): 369.19, found: 369.18
ER-897924	$C_{20}H_{24}N_4O_3$	368.43	0.0880	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((R)-1-hydroxybutan-2-yl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C20H24N4O3(M+H+): 369.19, found: 369.18
ER-897925	$C_{19}H_{22}N_4O_4$	370.41	0.1780	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(1,3-dihydroxypropan-2-yl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C19H22N4O4 (M+H+): 371.17, found: 371.16

FIG. 6JJJ

ER-897926	$C_{19}H_{22}N_4O_4$	370.41	0.1710	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(2,3-dihydroxypropyl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C19H22N4O4 (M+H+): 371.17, found 371.16
ER-897927	$C_{21}H_{24}N_4O_3$	380.45	0.0500	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(((R)-tetrahydrofuran-2-yl)methyl)morpholine-2-carboxamide	LCMS (ESI+) calcd for C21H24N4O3 (M+H+): 381.19; found: 381.18
ER-897928	$C_{21}H_{24}N_4O_3$	380.45	0.0440	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((tetrahydrofuran-2-yl)methyl)morpholine-2-carboxamide	LCMS (ESI+) calcd for C21H24N4O3 (M+H+): 381.19; found: 381.18
ER-897929	$C_{21}H_{26}N_4O_3$	382.46	0.0800	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(2-propoxyethyl)morpholine-2-carboxamide	LCMS (ESI+) calcd for C21H26N4O3 (M+H+): 383.20; found: 383.2
ER-897930	$C_{21}H_{26}N_4O_3$	382.24	0.0810	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((R)-1-hydroxypentan-2-yl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C21H26N4O3 (M+H+): 383.20; found: 383.2

FIG. 6KKK

ER-897931	$C_{21}H_{26}N_4O_3$	382.46	0.0750	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(2-isopropoxyethyl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C21H26N4O3 (M+H+): 383.20; found: 383.2
ER-897932	$C_{21}H_{26}N_4O_3$	382.46	0.0220	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(1-methoxybutan-2-yl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C21H26N4O3 (M+H+): 383.20; found: 383.2
ER-897933	$C_{24}H_{23}FN_4O_3$	434.47	0.0560	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(2-(2-fluorophenyl)-2-hydroxyethyl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C24H23FN4O3 (M+H+):435.18; found: 435.18
ER-897934	$C_{21}H_{26}N_4O_3$	382.46	0.1180	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((R)-1-hydroxy-3-methylbutan-2-yl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C21H26N4O3 (M+H+): 383.20; found: 383.2
ER-897935	$C_{20}H_{24}N_4O_4$	384.43	0.0240	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(2,2-dimethoxyethyl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C20H24N4O4 (M+H+): 385.18; found: 385.18

FIG. 6LLL

ER-897936	$C_{20}H_{24}N_4O_4$	384.43	0.0510	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(2-(2-hydroxyethoxy)ethyl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C20H24N4O4 (M+H+): 385.18; found: 385.18
ER-897937	$C_{22}H_{26}N_4O_3$	394.47	0.0520	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((1S,2S)-2-hydroxycyclohexyl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C22H26N4O3 (M+H+): 395.20; found: 395.18
ER-897938	$C_{22}H_{26}N_4O_3$	394.47	0.0190	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(2-hydroxycyclohexyl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C22H26N4O3 (M+H+): 395.20; found: 395.2
ER-897939	$C_{22}H_{28}N_4O_3$	396.49	0.0630	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(1-hydroxyhexan-2-yl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C22H28N4O3 (M+H+): 397.22; found: 397.22
ER-897940	$C_{22}H_{28}N_4O_3$	396.49	0.0270	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((S)-1-hydroxy-3,3-dimethylbutan-2-yl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C22H28N4O3 (M+H+): 397.22; found: 397.22

FIG. 6MM

ER-897941	$C_{22}H_{28}N_4O_3$	396.49	0.0390	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((S)-1-hydroxyhexan-2-yl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C22H28N4O3 (M+H+): 397.22; found: 397.22
ER-897942	$C_{22}H_{28}N_4O_3$	396.49	0.0190	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((2S,3S)-1-hydroxy-3-methylpentan-2-yl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C22H28N4O3 (M+H+): 397.22; found: 397.22
ER-897943	$C_{22}H_{28}N_4O_3$	396.49	0.0710	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((S)-1-hydroxy-4-methylpentan-2-yl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C22H28N4O3 (M+H+): 397.22; found: 397.22
ER-897944	$C_{22}H_{28}N_4O_3$	396.49	0.1390	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((R)-1-hydroxy-4-methylpentan-2-yl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C22H28N4O3 (M+H+): 397.22; found: 397.22
ER-897945	$C_{22}H_{27}N_5O_3$	409.49	0.0070	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((4-methylmorpholin-2-yl)methyl)morpholine-2-carboxamide	LCMS (ESI+) calcd for C22H27N5O3 (M+H+): 410.21; found: 410.21

FIG. 6NNN

ER-897946	$C_{21}H_{26}N_4O_3S$	414.53	0.0540	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((S)-1-hydroxy-4-(methylthio)butan-2-yl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C21H26N4O3S (M+H+): 415.18; found: 415.17
ER-897947	$C_{24}H_{24}N_4O_3$	416.48	0.3950	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(2-phenoxyethyl)morpholine-2-carboxamide	LCMS (ESI+) calcd for C21H26N4O3S (M+H+): 415.18; found: 417.18
ER-897948	$C_{25}H_{26}N_4O_3$	430.51	0.0600	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((S)-1-hydroxy-3-phenylpropan-2-yl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C25H26N4O3 (M+H+): 431.2; found: 431.20
ER-897949	$C_{25}H_{26}N_4O_3$	430.51	0.4830	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(2-phenoxypropyl)morpholine-2-carboxamide	LCMS (ESI+) calcd for C25H26N4O3 (M+H+): 431.2; found: 431.20
ER-897950	$C_{25}H_{26}N_4O_3$	430.51	0.0700	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(2-hydroxy-3-phenylpropyl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C25H26N4O3 (M+H+): 431.2; found: 431.20

FIG. 6OOO

ER-897952	$C_{24}H_{25}N_5O_3$	431.49	0.0380	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(2-(pyridin-3-yloxy)propyl)morpholine-2-carboxamide	LCMS (ESI+) calcd for C24H25N5O3 (M+H+): 432.2; found: 432.2
ER-897955	$C_{24}H_{23}FN_4O_3$	434.47	0.3550	9.200	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(2-(4-fluorophenoxy)ethyl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C24H23FN4O3 (M+H+): 435.18; found: 435.18
ER-897956	$C_{24}H_{23}FN_4O_3$	434.47	0.0620	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(2-(3-fluorophenyl)-2-hydroxyethyl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C24H23FN4O3 (M+H+): 435.18; found: 435.18
ER-897957	$C_{25}H_{32}N_4O_3$	436.55	0.0800	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((S)-1-cyclohexyl-3-hydroxypropan-2-yl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C25H32N4O3 (M+H+): 437.25; found: 437.25
ER-897958	$C_{26}H_{26}N_4O_3$	442.52	0.1330	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(isochroman-1-ylmethyl)-6-methylmorpholine-2-carboxamide	LCMS (ESI+) calcd for C26H26N4O3 (M+H+): 443.20; found: 443.20

FIG. 6PPP

ER-897960	$C_{25}H_{26}N_4O_4$	446.50	0.1490	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(2-hydroxy-3-phenoxypropyl)-6-methylmorpholine-2-carboxamide		LCMS (ESI+) calcd for C25H26N4O4 (M+H+): 447.20; found: 447.2
ER-897961	$C_{25}H_{26}N_4O_4$	446.50	0.0280	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((1S,2R)-1-hydroxy-1-(4-hydroxyphenyl)propan-2-yl)-6-methylmorpholine-2-carboxamide		LCMS (ESI+) calcd for C25H26N4O4 (M+H+): 447.20; found: 447.2
ER-897962	$C_{25}H_{26}N_4O_4$	446.50	0.0230	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((1S)-1,3-dihydroxy-1-phenylpropan-2-yl)-6-methylmorpholine-2-carboxamide		LCMS (ESI+) calcd for C25H26N4O4 (M+H+): 447.20; found: 447.2
ER-897963	$C_{23}H_{30}N_6O_3$	438.53	0.0330	5.024	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(2-hydroxy-3-(piperazin-1-yl)propyl)-6-methylmorpholine-2-carboxamide		LCMS (ESI+) calcd for C23H30N6O3 (M+H+): 439.24; found: 439.24
ER-897964	$C_{19}H_{21}N_5O_2$	351.41	0.0280	4.526	(2R,6R)-N-(azetidin-3-yl)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide		LCMS (ESI+) calcd for C19H21N5O2 (M+H+): 352.17; found: 352.17

FIG. 6QQQ

ER-897965	$C_{20}H_{23}N_5O_2$	365.43	0.0100	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((S)-pyrrolidin-3-yl)morpholine-2-carboxamide	LCMS (ESI+) calcd for C20H23N5O2 (M+H+): 366.19; found: 366.19
ER-897966	$C_{20}H_{23}N_5O_2$	365.43	0.0370	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((R)-pyrrolidin-3-yl)morpholine-2-carboxamide	LCMS (ESI+) calcd for C20H23N5O2 (M+H+): 366.19; found: 366.19
ER-897967	$C_{21}H_{25}N_5O_2$	379.46	0.0100	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((S)-piperidin-3-yl)morpholine-2-carboxamide	LCMS (ESI+) calcd for C21H25N5O2 (M+H+): 380.20; found: 380.2
ER-897968	$C_{21}H_{25}N_5O_2$	379.46	0.0095	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((R)-piperidin-3-yl)morpholine-2-carboxamide	LCMS (ESI+) calcd for C21H25N5O2 (M+H+): 380.20; found: 380.2
ER-897969	$C_{21}H_{25}N_5O_2$	379.46	0.0150	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((S)-pyrrolidin-2-ylmethyl)morpholine-2-carboxamide	LCMS (ESI+) calcd for C21H25N5O2 (M+H+): 380.20; found: 380.19

FIG. 6RRR

ER-897970	$C_{25}H_{27}N_5O_2$	429.52	0.0380	> 10.0	(2R,6R)-N-(2-(benzylamino)ethyl)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide		LCMS (ESI+) calcd for C25H27N5O2 (M+H+): 430.22; found: 430.22
ER-898560	$C_{21}H_{19}N_5O_2$	373.41	0.0380	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(pyridin-2-yl)morpholine-2-carboxamide	1H NMR (400 MHz, METHANOL-d4) 1.38 (3 H), 2.76 (1 H), 2.91 (1 H), 3.41 (1 H), 3.77 (1 H), 4.24 (1 H), 4.66 (1 H), 7.15 (1 H), 7.28 (1 H), 7.65 (1 H), 7.8 (1 H), 8.14 (2 H), 8.28 (1 H), 8.68 (1 H), 8.97 (1 H).	LCMS (ESI+) calcd for C21H19N5O2 (M+H+): 374.16; found: 374.16
ER-898561	$C_{22}H_{21}N_5O2$	387.44	0.0530	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(6-methylpyridin-2-yl)morpholine-2-carboxamide	1H NMR (400 MHz, METHANOL-d4) 1.39 (3 H), 2.44 (1 H), 2.76 (1H), 2.90 (1 H), 3.41 (1 H), 3.76 (1 H), 4.23 (1 H), 4.65 (1 H), 7.02 (1 H), 7.28 (1 H), 7.66 (1 H), 7.96 (2 H), 8.13 (1 H), 8.68 (1 H), 8.97 (1 H).	
ER-898562	$C_{20}H_{19}N_5O3$	377.40	0.1570	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(5-methylisoxazol-3-yl)morpholine-2-carboxamide	1H NMR (400 MHz, CHLOROFORM-d1) 1.35 (3 H), 2.40 (3 H), 2.71 (1 H), 2.86 (1 H), 3.32 (1 H), 3.80 (1 H), 4.16 (1 H), 4.56 (1 H), 6.68 (1 H), 7.10 (1 H), 7.54 (1 H), 8.04 (1 H), 8.47 (1 H), 8.99 (1 H), 9.09 (1 H).	LCMS (ESI+) calcd for C20H19N5O3 (M+H+): 378.15; found: 378.1
ER-898563	$C_{18}H_{16}N_4F_3O_2$	378.35	0.0180	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(2,2,2-trifluoroethyl)morpholine-2-carboxamide	1H NMR (400 MHz, CHLOROFORM-d1) 1.37 (3 H), 2.76 (2 H), 3.33 (1 H), 3.82 (1 H), 3.99 (2 H), 4.15 (1 H), 4.53 (1 H), 7.00 (1 H), 7.12 (1 H), 7.56 (1 H), 8.07 (1 H), 8.49 (1 H), 9.11 (1 H).	LCMS (ESI+) calcd for C18H17F3N4O2 (M+H+): 378.15; found: 380.3

FIG. 6SSS

ER-898564	$C_{18}H_{18}F_2N_4O_2$	360.36	0.3330	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(2,2-difluoroethyl)-6-methylmorpholine-2-carboxamide		LCMS (ESI+) calcd for C18H18F2N4O2 (M+H+): 361.14; found: 361.1
ER-898565	$C_{19}H_{19}F_3N_4O_2$	392.38	0.0340	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(3,3,3-trifluoropropyl)morpholine-2-carboxamide	1H NMR (400 MHz, CHLOROFORM-d1) □□ppm 1.31 (3 H), 2.38 (2 H), 2.70 (3 H), 3.28 (1 H), 3.56 (2 H), 3.77 (1 H), 4.09 (1 H), 4.42 (1 H), 7.07 (1 H), 7.52 (1 H), 8.03 (1 H), 8.45 (1 H), 9.07 (1 H).	LCMS (ESI+) calcd for C19H19F3N4O2 (M+H+): 393.15; found: 393.25
ER-898566	$C_{22}H_{29}N_5O_2$	395.50	0.0030	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(2-(dimethylamino)-2-methylpropyl)-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, CHLOROFORM-d1) □□ppm 1.03 (6 H), 1.35 (3H), 2.24 (6 H), 2.75 (2 H), 3.23 (2 H), 3.31 (1 H), 3.77 (1 H), 3.83 (1 H), 4.11 (1 H), 4.45 (1 H), 7.10 (1 H), 7.54 (1 H), 8.05 (1 H), 8.50 (1 H), 9.09 (1 H).	LCMS (ESI+) calcd for C22H29N5O2 (M+H+): 396.24; found: 397.56
ER-898694	HCl $C_{21}H_{26}ClN_5O_3$	431.92	0.0020	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((S)-morpholin-2-ylmethyl)morpholine-2-carboxamide hydrochloride	1H NMR (d6 DMSO) d ppm 9.2 (br s 1H), 9.02 (dd, 1H), 8.56 (dd, 1H), 8.21 (d, 1H), 7.97 (d, 1H), 7.65 (dd, 1H), 7.21 (d, 1H), 4.39 (dd, 1H), 4.02 _m, 1H), 3.89 (m,1H), 3.73 (m, 1H), 3.65 (m, 1H), 3.50 (m, 1H), 3.30 (m, 2H), 3.20-3.08 (m, 4H), 2.91 (m, 1H), 2.74 (t, 1H), 2.63 (m, 1H), 1,20 (d, 3H)	(ESI+)calcd. For: C21H25N5O3 395.5 found 396.4 (m+1)
ER-898707	CH_3CO_2H $C_{24}H_{31}N_5O_5$	469.54	0.0050	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(((S)-4-methylmorpholin-2-yl)methyl)morpholine-2-carboxamide acetic acetate	1H NMR (d4 methanol) d ppm 8.95 (ddd, 1H), 8.62 (dd, 1H), 8.10 (d, 1H), 7.61 (d, 1H), 7.21 (d, 1H), 4.85 (s, 1H), 4.82 (d, 1H) 4.46 (dd, 1H), 4.14 (m,1H), 3.88 (m, 1H), 3.69-3.57 (m, 3H), 3.37-3.29 (m, 3H), 2.83-2.67 (m, 3H), 2.33 (s, 3H), 2.26 (m, 1H), 1.95 (3, 3H), 1.93 (m, 1H) 1,20 (d, 3H)	(ESI+)calcd. For: C22H27N5O3 409.2 found 410.2 (m+1)

FIG. 6TTT

ER-898914	$C_{18}H_{19}FN_4O_2$	342.37	0.0310	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(2-fluoroethyl)-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, CHLOROFORM-d1) □□ppm 1.33 (3 H), 2.75 (2 H), 3.32 (1 H), 3.65 (2 H), 3.82 (1 H), 4.12 (1 H), 4.48 (2 H), 4.61 (1 H), 7.03 (1 H), 7.10 (1 H), 7.55 (1 H), 8.06 (1 H), 8.49 (1 H), 9.10 (1 H).	LCMS (ESI+) calcd for C18H19FN4O2 (M+H+): 343.15; found: 343.06
ER-898915	$C_{19}H_{21}FN_4O_2$	356.40	0.0374	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(3-fluoropropyl)-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, CHLOROFORM-d1) □□ppm 1.33 (3 H), 1.97 (2 H), 2.71 (2 H), 3.30 (1 H), 3.47 (2 H), 3.81 (1 H), 4.10 (1 H), 4.42 (1 H), 4.49 (1 H), 4.61 (1 H), 6.88 (1 H), 7.08 (1 H), 7.53 (1 H), 8.03 (1 H), 8.47 (1 H), 9.07 (1 H).	LCMS (ESI+) calcd for C19H21FN4O2 (M+H+): 357.17; found: 357.26
ER-898916	$C_{19}H_{19}F_3N_4O_2$	420.43	0.0584	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((S)-1,1,1-trifluoropropan-2-yl)morpholine-2-carboxamide	1H NMR (400 MHz, CHLOROFORM-d1) □□ppm 1.37 (6 H), 2.73 (2 H), 3.31 (1 H), 3.31 (1 H), 4.12 (1 H), 4.72 (1 H), 6.74 (1 H), 7.10 (1 H), 7.55 (1 H), 8.05 (1 H), 8.47 (1 H), 9.09 (1 H).	LCMS (ESI+) calcd for C19H19F3N4O2 (M+H+): 393.15; found: 393.15
ER-898917	$C_{21}H_{23}F_3N_4O_2$	420.43	0.4860	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((R)-1,1,1-trifluoropropan-2-yl)morpholine-2-carboxamide	1H NMR (400 MHz, CHLOROFORM-d1) □□ppm 1.01 (6 H), 1.35 (3 H), 2.21 (1 H), 2.73 (2 H), 3.32 (1 H), 3.85 (1 H), 4.14 (1 H), 4.51 (2 H), 6.83 (1 H), 7.11 (1 H), 7.54 (1 H), 8.05 (1 H), 8.48 (1 H), 9.09 (1 H)	LCMS (ESI+) calcd for C21H23F3N4O2 (M+H+): 421.18; found: 421.18
ER-898918	$C_{21}H_{22}N_6O_2$	390.45	0.0321	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(1,3-dimethyl-1H-pyrazol-5-yl)-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, CHLOROFORM-d1) □□ppm 1.41 (3 H), 2.24 (3 H), 2.76 (1 H), 2.89 (1 H), 3.35 (1 H), 3.70 (3 H), 3.86 (1 H), 4.20 (1 H), 4.62 (1 H), 6.11 (1 H), 7.13 (1 H), 7.56 (1 H), 8.06 (1 H), 8.24 (1 H), 8.49 (1 H), 9.10 (1 H).	LCMS (ESI+) calcd for C21H22N6O2 (M+H+): 391.18; found: 391.27

FIG. 6UUU

ER-898919		$C_{20}H_{20}N_6O_2$	376.42	0.0137	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(1-methyl-1H-pyrazol-5-yl)morpholine-2-carboxamide	H NMR (400 MHz, CHLOROFORM-d1) □□ppm 1.41 (3 H), 2.77 (1 H), 2.91 (1 H), 3.37 (1 H), 3.79 (3 H), 3.88 (1 h), 4.22 (1 H), 4.64 (1 H), 6.32 (1 H), 7.14 (1 H), 7.46 (1 H), 7.57 (1 H), 8.07 (1 H), 8.30 (1 H), 8.50 (1 H), 9.11 (1 H).	LCMS (ESI+) calcd for C20H20N6O2 (M+H+): 377.17; found: 377.28
ER-898920		$C_{18}H_{17}N_5O_2$	335.37	0.0450	> 10.0	(2R,6R)-N-(cyanomethyl)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide	H NMR (400 MHz, CHLOROFORM-d1) 1.35 (3 H), 2.70 (1 H), 2.81 (1 H), 3.32 (1 H), 3.79 (1 H), 4.14 (1 H), 4.27 (2 H), 4.52 (1 H), 7.11 (2 H), 7.56 (1 H), 8.06 (1 H), 8.47 (1 H), 9.10 (1 H).	LCMS (ESI+) calcd for C18H17N5O2 (M+H+): 336.14; found: 336.14
ER-898921		$C_{20}H_{19}N_5O_2$	361.40	0.0870	> 10.0	(2R,6R)-N-(1-cyanocyclopropyl)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide	H NMR (400 MHz, CHLOROFORM-d1) □□ppm 1.34 (5 H), 1.62 (2 H), 2.68 (1 H), 2.80 (1 H), 3.31 (1 H), 3.79 (1 H), 4.11 (1 H), 4.46 (1 H), 7.11 (1 H), 7.16 (1 H), 7.11 (1 H), 8.06 (1 H), 8.46 (1 H), 9.10 (1 H).	LCMS (ESI+) calcd for C20H19N5O2 (M+H+): 362.16; found: 362.15
ER-898922		$C_{18}H_{16}N_6O_2S$	380.43	0.0650	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(1,2,4-thiadiazol-5-yl)morpholine-2-carboxamide	H NMR (400 MHz, CHLOROFORM-d1) □□ppm 1.42 (3 H), 2.76 (1 H), 2.95 (1 H), 3.39 (1 H), 3.87 (1H), 4.25 (1 H), 4.78 (1 H), 7.14 (1 H), 7.59 (1 H), 8.08 (1 H), 8.39 (1 H), 8.50 (1 H), 9.22 (1 H), 10.17 (1 H).	LCMS (ESI+) calcd for C18H16N6O2S (M+H+): 381.11; found: 381.11
ER-898923		$C_{19}H_{18}N_6O_2S$	394.46	0.0650	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(3-methyl-1,2,4-thiadiazol-5-yl)morpholine-2-carboxamide	H NMR (400 MHz, CHLOROFORM-d1) 1.39 (3 H), 2.60 (3 H), 2.75 (1 H), 2.93 (1 H), 3.37 (1 H), 3.86 (1 H), 4.24 (1 H), 4.75 (1 H), 7.13 (1 H), 7.58 (1 H), 8.08 (1 H), 8.49 (1 H), 9.12 (1 H), 10.08 (1 H).	LCMS (ESI+) calcd for C19H18N6O2S (M+H+): 395.12; found: 395.12

FIG. 6VVV

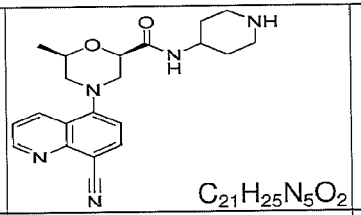
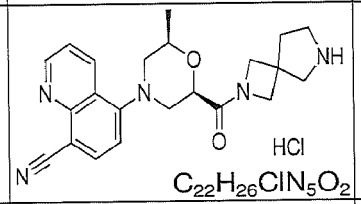
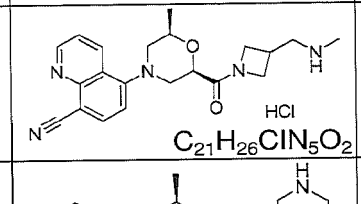
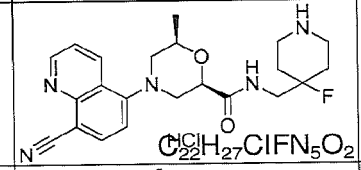
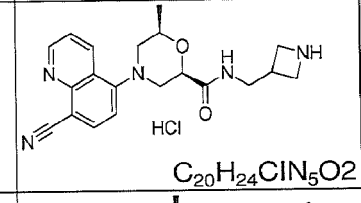
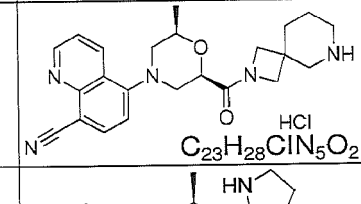
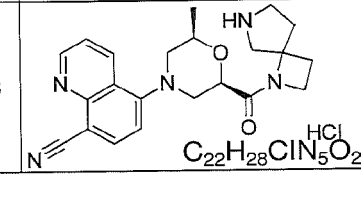
ER-898946	 $C_{21}H_{25}N_5O_2$	379.46	0.0030	2.110	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(piperidin-4-yl)morpholine-2-carboxamide	1H NMR (400 MHz, CD3OD) δ ppm: 1.30-1.35 (d, 3H), 1.45-1.58 (m, 2H), 1.79-1.90 (m, 2H), 2.63-2.83 (m, 4H), 3.03-3.11 (m, 2H), 3.35-3.41 (dt, 1H), 3.65-3.71 (dt, 1H), 3.79-3.89 (m, 1H), 4.09-4.19 (m, 1H), 4.43-4.48 (dd, 1H), 7.24-7.28 (d, 1H), 7.63-7.67 (dd, 1H), 8.12-8.16 (d, 1H), 8.64-8.68 (dd, 1H), 8.96-8.99 (dd, 1H).	LCMS (ESI+) calcd for C21H25N5O2 (M+H+): 380.20; found: 380.2
ER-899017	 HCl $C_{22}H_{26}ClN_5O_2$	427.93	0.0160	1.070	5-((2R,6R)-2-methyl-6-(2,6-diazaspiro[3.4]octane-2-carbonyl)morpholino)quinoline-8-carbonitrile hydrochloride	δ 1.15, (d, 3H), 1.22, (t, 2H), 2.10, (m, 2H), 2.61, (m, 1H), 2.84, (m, 1H), 3.08, (m, 2H), 3.12, (m, 1H), 3.40, (d, 1H), 3.79, (dd, 1H), 3.89, (dd, 1H), 3.96, (m, 1H), 4.25, (dd, 1H), 4.33, (dd, 1H), 4.49, (t, 1H), 7.21, (d, 1H), 7.65, (dd, 1H), 8.21, (d, 1H), 8.53, (d, 1H), 8.98, (br s, 2H), 9.01, (d, 1H)	LCMS (ESI+) calcd for C22H25N5O2 (M+H+): 392.40; found: 392.33
ER-899018	 HCl $C_{21}H_{26}ClN_5O_2$	415.92	0.0220	>10.0	5-((2R,6R)-2-methyl-6-(3-((methylamino)methyl)azetidine-1-carbonyl)morpholino)quinoline-8-carbonitrile hydrochloride	δ 1.14 (d, 3H), 2.49, (m, 2H), 2.63, (s, 3H), 2.86, (m, 2H), 3.12, (m, 2H), 3.32, (m, 1H), 3.40, (m, 1H), 3.68, (m, 1H), 3.94, (m, 2H), 4.15, (m, 1H), 4.38, (m, 1H), 4.47, (m, 1H), 7.21, (d, 1H), 7.65, (dd, 1H), 8.21, (d, 1H), 8.53, (d, 1H), 8.62, (br s, 2H), 9.01, (d, 1H)	
ER-899019	 HCl $C_{22}H_{27}ClFN_5O_2$	447.94	0.0300	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((4-fluoropiperidin-4-yl)methyl)-6-methylmorpholine-2-carboxamide hydrochloride	δ 1.17, (d, 3H), 1.62, (m, 2H), 1.74, (m, 2H), 2.60, (m, 1H), 2.89, (m, 3H), 3.18, (m, 1H), 3.32, (m, 3H), 3.42, (d, 1H), 3.75, (t, 1H), 3.97, (m, 2H), 4.17, (dd, 1H), 4.49, (t, 1H), 7.21, (d, 1H), 7.65, (dd, 1H), 8.21, (d, 1H), 8.53, (d, 1H), 8.70, (br s, 2H), 9.01, (d, 1H)	
ER-899020	 HCl $C_{20}H_{24}ClN_5O2$	401.90	0.0290	>10.0	(2R,6R)-N-(azetidin-3-ylmethyl)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide hydrochloride	δ 1.21, (d, 3H), 2.63, (t, 1H), 2.76, (t, 1H), 2.87, (m, 1H), 2.99, (m, 1H), 3.28, (m, 2H), 3.33, (d, 1H), 3.54, (m, 1H), 3.68, (m, 2H), 3.85, (m, 1H), 4.01, (m, 1H), 4.38, (m, 2H), 7.23, (d, 1H), 7.65, (dd, 1H), 8.21, (m, 2H), 8.55, (d, 1H), 9.01, (d, 1H)	
ER-899021	 HCl $C_{23}H_{28}ClN_5O_2$	441.96	0.0230	11.800	5-((2R,6R)-2-methyl-6-(2,6-diazaspiro[3.5]nonane-2-carbonyl)morpholino)quinoline-8-carbonitrile hydrochloride	δ 1.16, (d, 3H), 1.35, (d, 1H), 1.62, (m, 2H), 1.75, (m, 2H), 2.60, (m, 1H), 2.88, (m, 2H), 3.18, (m, 2H), 3.33, (m, 2H), 3.42, (d, 1H), 3.75, (t, 1H), 3.97, (m, 2H), 4.16, (dd, 1H), 4.49, (t, 1H), 7.21, (d, 1H), 7.65, (dd, 1H), 8.21, (d, 1H), 8.53, (d, 1H), 8.70, (br s, 2H), 9.01, (d, 1H)	
ER-899023	 HCl $C_{22}H_{28}ClN_5O_2$	427.93	0.0360	11.250	5-((2R,6R)-2-methyl-6-(1,6-diazaspiro[3.4]octane-1-carbonyl)morpholino)quinoline-8-carbonitrile hydrochloride	δ 1.15, (d, 3H), 2.08, (m, 1H), 2.30, (m, 1H), 2.44, (m, 1H), 2.61, (t, 1H), 2.87, (m, 1H), 3.19, (m, 2H), 3.33, (m, 2H), 3.41, (m, 2H), 3.81, (m, 1H), 3.96, (m, 1H), 4.18, (m, 2H), 4.46, (dd, 1H), 7.21, (d, 1H), 7.65, (dd, 1H), 8.21, (d, 1H), 8.53, (d, 1H), 8.70, (br s, 2H), 9.01, (d, 1H)	

FIG. 6WWW

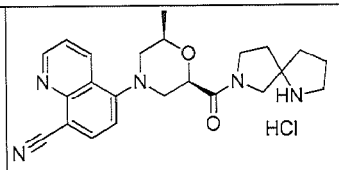
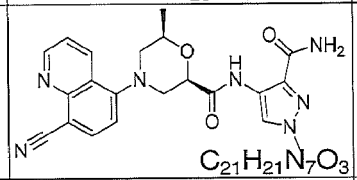
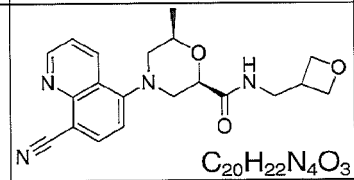
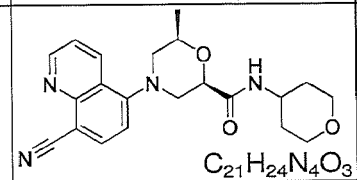
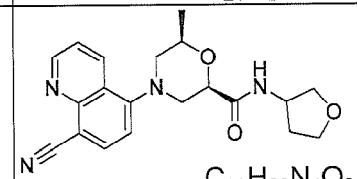
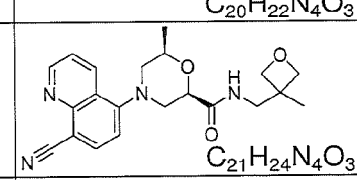
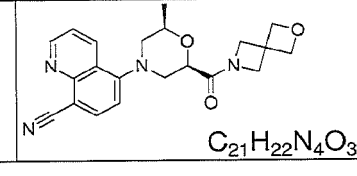
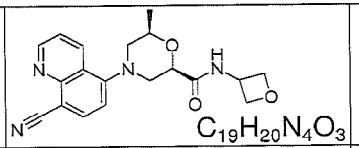
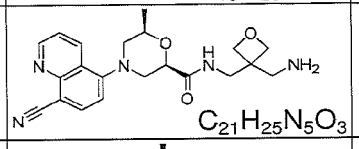
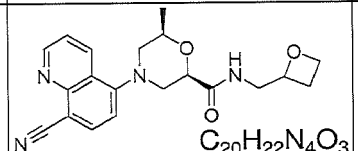
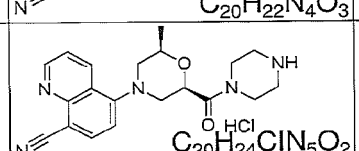
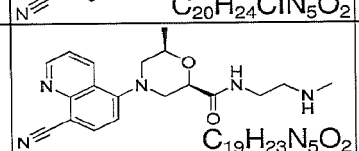
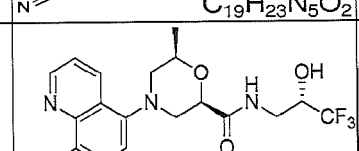
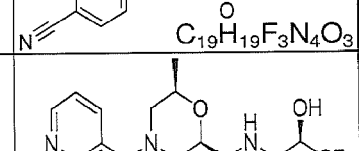
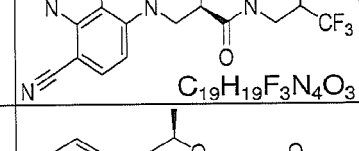
ER-899024	 $C_{23}H_{28}ClN_5O_2$	441.96	0.2050	2.190	5-((2R,6R)-2-methyl-6-(1,7-diazaspiro[4.4]nonane-7-carbonyl)morpholino)quinoline-8-carbonitrile hydrochloride	δ 1.15, (d, 3H), 1.87, (m, 4H), 2.63, (m, 1H), 2.95, (m, 1H), 3.09, (m, 2H), 3.23, (m, 2H), 3.35, (m, 4H), 3.60, (m, 1H), 4.00, (m, 2H), 4.58, (t, 1H), 7.23, (d, 1H), 7.63, (dd, 1H), 8.21, (d, 1H), 8.55, (d, 1H), 9.01, (d, 1H)	
ER-899025	 $C_{21}H_{21}N_7O_3$	419.44	0.0510	>10.0	(2R,6R)-N-(3-carbamoyl-1-methyl-1H-pyrazol-4-yl)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide	δ 1.23, (d, 3H), 2.67, (m, 1H), 2.83, (t, 1H), 3.38, (d, 1H), 3.62, (d, 1H), 3.84, (s, 3H), 4.12, (m, 1H), 4.61, (d, 1H), 7.25, (d, 1H), 7.42, (s, 1H), 7.66, (m, 2H), 8.18, (s, 1H), 8.22, (d, 1H), 8.59, (d, 1H), 9.02, (d, 1H), 10.59, (s, 1H)	
ER-899121	 $C_{20}H_{22}N_4O_3$	366.42	0.0200	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(oxetan-3-ylmethyl)morpholine-2-carboxamide	1H NMR (400 MHz, CD3OD) δ ppm: 1.28-1.33 (d, 3H), 2.67-2.81 (m, 2H), 3.14-3.23 (m, 1H, overlaping with signal of CD3OD), 3.32-3.39 (m, 1H), 3.48-3.53 (d, 2H), 3.64-3.70 (m, 1H), 4.05-4.15 (m, 1H), 4.38-4.48 (m, 3H), 4.69-4.76 (m, 2H), 7.21-7.25 (d, 1H), 7.60-7.65 (dd, 1H), 8.10-8.14 (d, 1H), 8.61-8.66 (dd, 1H), 8.94-8.97 (dd, 1H).	LCMS (ESI+) calcd for C20H22N4O3 (M+H+): 367.17; found: 367.29
ER-899122	 $C_{21}H_{24}N_4O_3$	380.45	0.0080	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(tetrahydro-2H-pyran-4-yl)morpholine-2-carboxamide	1H NMR (400 MHz, CD3OD) δ ppm: 1.28-1.35 (d, 3H), 1.55-1.70 (m, 2H), 1.71-1.84 (m, 2H), 2.65-2.83 (m, 2H), 3.32-3.41 (m, 1H), 3.41-3.51 (m, 2H), 3.62-3.72 (m, 1H), 3.88-4.00 (m, 3H), 4.05-4.18 (m, 1H), 4.41-4.48 (dd, 1H), 7.23-7.28 (d, 1H), 7.62-7.67 (dd, 1H), 8.13-8.16 (d, 1H), 8.63-8.68 (dd, 1H), 8.96-9.00 (dd, 1H).	LCMS (ESI+) calcd for C21H24N4O3 (M+H+): 381.19; found: 381.3
ER-899123	 $C_{20}H_{22}N_4O_3$	366.42	0.0655	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(tetrahydrofuran-3-yl)morpholine-2-carboxamide	1H NMR (400 MHz, CD3OD) δ ppm: 1.30-1.34 (d, 3H), 1.85-1.96 (m, 1H), 2.17-2.30 (m, 1H), 2.67-2.76 (t, 1H), 2.76-2.85 (t, 1H), 3.34-3.41 (d, 1H), 3.60-3.70 (m, 2H), 3.75-3.82 (q, 1H), 3.82-3.89 (m, 1H), 3.90-3.98 (q, 1H), 4.09-4.18 (m, 1H), 4.40-4.49 (m, 2H), 7.24-7.28 (d, 1H), 7.62-7.67 (dd, 1H), 8.12-8.16 (d, 1H), 8.63-8.68 (dd, 1H), 8.96-8.99 (dd, 1H).	LCMS (ESI+) calcd for C20H22N4O3 (M+H+): 367.17; found: 367.25
ER-899131	 $C_{21}H_{24}N_4O_3$	366.42	0.0423	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((3-methyloxetan-3-yl)methyl)morpholine-2-carboxamide	δ 1.14, (s, 3H), 1.21, (d, 3H), 2.64, (t, 1H), 2.75, (t, 1H), 3.11, (d, 2H), 3.34, (d, 1H), 3.52, (d, 1H), 4.05, (m, 1H), 4.09, (d, 2H), 4.36, (d, 2H), 4.41, (d, 1H), 7.22, (d, 1H), 7.66, (dd, 1H), 8.00, (t, 1H), 8.20, (d, 1H), 8.56, (d, 1H), 9.01, (d, 1H)	
ER-899132	 $C_{21}H_{22}N_4O_3$	378.43	0.1470	>10.0	5-((2R,6R)-2-methyl-6-(2-oxa-6-azaspiro[3.3]heptane-6-carbonyl)morpholino)quinoline-8-carbonitrile	δ 1.16, (d, 3H), 2.59, (t, 1H), 2.83, (t, 1H), 3.31, (d, 1H), 3.39, (d, 1H), 3.95, (m, 1H), 4.01, (s, 2H), 4.44, (m, 1H), 4.46, (s, 2H), 4.62, (m, 4H), 7.21, (d, 1H), 7.64, (dd, 1H), 8.20, (d, 1H), 8.52, (d, 1H), 9.00, (d, 1H)	

FIG. 6XXX

ER-899133	 $C_{19}H_{20}N_4O_3$	378.43	0.1280	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(oxetan-3-yl)morpholine-2-carboxamide	δ 1.22, (d, 3H), 2.63, (t, 1H), 2.77, (t, 1H), 3.34, (d, 1H), 3.49, (d, 1H), 4.02, (m, 1H), 4.36, (d, 1H), 4.50, (m, 2H), 4.62, (m, 2H), 4.79, (m, 1H), 7.22, (d, 1H), 7.65, (dd, 1H), 8.20, (d, 1H), 8.55, (t, 1H), 9.01, (d, 1H)	
ER-899134	 $C_{21}H_{25}N_5O_3$	395.46	0.0640	>10.0	(2R,6R)-N-((3-(aminomethyl)oxetan-3-yl)methyl)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide	δ 1.20, (d, 3H), 2.62, (m, 3H), 2.72, (t, 1H), 3.09, (m, 1H), 3.32, (m, 4H), 3.52, (d, 1H), 4.03, (m, 1H), 4.24, (m, 2H), 4.41, (d, 1H), 7.21, (d, 1H), 7.65, (dd, 1H), 8.12, (t, 1H), 8.20, (d, 1H), 8.56, (d, 1H), 9.01, (d, 1H)	
ER-899135	 $C_{20}H_{22}N_4O_3$	366.42	0.2520	>10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(oxetan-2-ylmethyl)morphole-2-carboxamide	δ 1.20, (d, 3H), 2.28, (m, 1H), 2.53, (m, 1H), 2.63, (m, 1H), 2.75, (t, 1H), 3.28, (m, 1H), 3.34, (m, 2H), 3.53, (d, 1H), 4.02, (m, 1H), 4.39, (m, 3H), 4.69, (m, 1H), 7.22, (d, 1H), 7.65, dd, (1H), 7.83, (m, 1H), 8.20, (d, 1H), 8.57, (d, 1H), 9.01, (d, 1H)	
ER-899136	 $C_{20}H_{24}ClN_5O_2$	378.43	0.1080	>10.0	5-((2R,6R)-2-methyl-6-(piperazine-1-carbonyl)morpholino)quinoline-8-carbonitrile hydrochloride	δ 1.14, (d, 3H), 2.63, (t, 1H), 2.98, (m, 5H), 3.33, (m, 3H), 3.45, (m, 2H), 3.54, (m, 1H), 4.02, (m, 1H), 4.69, (d, 1H), 7.21, (d, 1H), 7.63, (dd, 1H), 8.21, (d, 1H), 8.57, (d, 1H), 8.75, (br, s, 2H), 9.00, (d, 1H)	
ER-899140	 $C_{19}H_{23}N_5O_2$	353.42	0.0160	3.271	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(2-(methylamino)ethyl)morpholine-2-carboxamide	1H NMR (400 MHz, CD3OD) δ ppm: 1.30-1.35 (d, 3H), 2.43 (s, 3H), 2.67-2.85 (m, 4H), 3.33-3.48 (m, 3H), 3.67-3.74 (m, 1H), 4.10-4.18 (m, 1H), 4.45-4.51 (dd, 1H), 7.25-7.28 (d, 1H), 7.63-7.68 (dd, 1H), 8.13-8.17 (d, 1H), 8.65-8.69 (dd, 1H), 8.97-9.00 (dd, 1H). Exact mass calculated: 353.4	LCMS (ESI+) calcd for C19H23N5O2 (M+H+): 354.19; found: 354.3
ER-899151	 $C_{19}H_{19}F_3N_4O_3$	408.38	0.0330	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((S)-3,3,3-trifluoro-2-hydroxypropyl)morpholine-2-carboxamide	1H NMR (400 MHz, CD3OD) δ ppm: 1.30-1.35 (d, 3H), 2.66-2.83 (m, 2H), 3.32-3.42 (m, 2H), 3.58-3.65 (dd, 1H), 3.65-3.73 (m, 1H), 4.05-4.20 (m, 2H), 4.47-4.53 (dd, 1H), 7.24-7.28 (d, 1H), 7.63-7.68 (dd, 1H), 8.13-8.17 (d, 1H), 8.65-8.70 (dd, 1H), 8.96-9.00 (dd, 1H).	LCMS (ESI+) calcd for C19H19F3N4O3 (M+H+): 409.14; found: 409.24
ER-899152	 $C_{19}H_{19}F_3N_4O_3$	408.38	0.0260	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((R)-3,3,3-trifluoro-2-hydroxypropyl)morpholine-2-carboxamide	1H NMR (400 MHz, CD3OD) δ ppm: 1.30-1.35 (d, 3H), 2.66-2.83 (m, 2H), 3.32-3.42 (m, 2H), 3.58-3.65 (dd, 1H), 3.65-3.73 (m, 1H), 4.05-4.20 (m, 2H), 4.47-4.53 (dd, 1H), 7.23-7.28 (d, 1H), 7.62-7.68 (dd, 1H), 8.12-8.17 (d, 1H), 8.64-8.69 (dd, 1H), 8.96-9.00 (dd, 1H).	LCMS (ESI+) calcd for C19H19F3N4O3 (M+H+): 409.14; found: 409.24
ER-899153	 $C_{19}H_{20}N_4O_4$	368.39	0.0400	> 10.0	methyl 2-((2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamido)acetate	1H NMR (400 MHz, CD3OD) δ ppm: 1.31-1.36 (d, 3H), 2.68-2.77 (t, 1H), 2.79-2.87 (t, 1H), 3.35-3.43 (m, 1H), 3.66-3.73 (m, 4H), 3.99 (s, 2H), 4.10-4.20 (m, 1H), 4.50-4.56 (dd, 1H), 7.25-7.30 (d, 1H), 7.62-7.68 (dd, 1H), 8.12-8.18 (d, 1H), 8.64-8.70 (dd, 1H), 8.95-9.00 (dd, 1H)	LCMS (ESI+) calcd for C19H20N4O4 (M+H+): 369.15; found: 369.19

SUBSTITUTE SHEET (RULE 26)

FIG. 6YYY

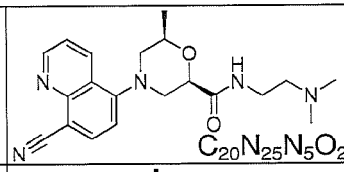
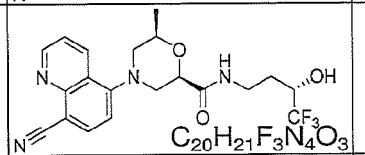
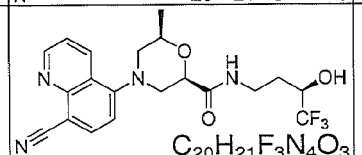
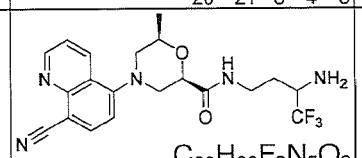
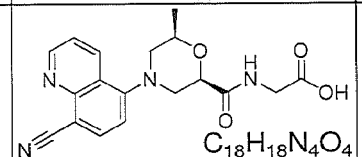
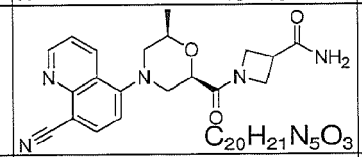
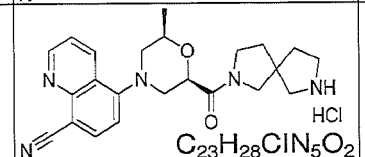
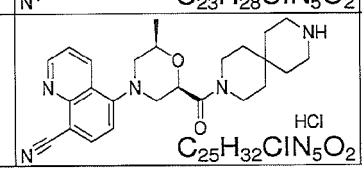
ER-899154	 $C_{20}N_{25}N_5O_2$	367.45	0.0150	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(2-(dimethylamino)ethyl)-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, CD3OD) δ ppm: 1.28-1.35 (d, 3H), 2.65-2.72 (t, 1H), 2.81 (s, 6H), 3.10-3.18 (t, 2H), 3.26-3.30 (m, 1H), 3.35-3.40 (d, 1H), 3.50-3.58 (m, 1H), 3.60-3.72 (m, 2H), 4.08-4.18 (m, 1H), 4.47-4.53 (dd, 1H), 7.20-7.26 (d, 1H), 7.60-7.65 (dd, 1H), 8.08-8.15 (d, 1H), 8.60-8.66 (dd, 1H), 8.94-8.98 (dd, 1H).	LCMS (ESI+) calcd for C20H25N5O4 (M+H+): 368.20; found: 368.27
ER-899159	 $C_{20}H_{21}F_3N_4O_3$	422.40	0.0360	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((S)-4,4,4-trifluoro-3-hydroxybutyl)morpholine-2-carboxamide	1H NMR (400 MHz, CD3OD) δ ppm: 1.31-1.37 (d, 3H), 1.67-1.78 (m, 1H), 1.87-1.96 (m, 1H), 2.67-2.83 (m, 2H), 3.35-3.54 (m, 3H), 3.68-3.75 (m, 1H), 3.94-4.00 (m, 1H), 4.12-4.20 (m, 1H), 4.45-4.52 (dd, 1H), 7.25-7.30 (d, 1H), 7.64-7.70 (dd, 1H), 8.13-8.19 (d, 1H), 8.66-8.70 (dd, 1H), 8.97-9.01 (dd, 1H).	LCMS (ESI+) calcd for C20H21F3N4O3 (M+H+): 423.16; found: 423.19
ER-899160	 $C_{20}H_{21}F_3N_4O_3$	422.40	0.0290	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((R)-4,4,4-trifluoro-3-hydroxybutyl)morpholine-2-carboxamide	1H NMR (400 MHz, CD3OD) δ ppm: 1.31-1.37 (d, 3H), 1.67-1.78 (m, 1H), 1.87-1.96 (m, 1H), 2.67-2.83 (m, 2H), 3.35-3.53 (m, 3H), 3.68-3.75 (m, 1H), 3.91-4.00 (m, 1H), 4.12-4.19 (m, 1H), 4.45-4.52 (dd, 1H), 7.25-7.30 (d, 1H), 7.63-7.69 (dd, 1H), 8.13-8.18 (d, 1H), 8.65-8.70 (dd, 1H), 8.97-9.01 (dd, 1H).	LCMS (ESI+) calcd for C20H21F3N4O3 (M+H+): 423.16; found: 423.2
ER-899161	 $C_{20}H_{22}F_3N_5O_2$	421.42	0.0350	> 10.0	(2R,6R)-N-(3-amino-4,4,4-trifluorobutyl)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, CD3OD) δ ppm: 1.31-1.36 (d, 3H), 1.53-1.63 (m, 1H), 1.90-2.00 (m, 1H), 2.68-2.83 (m, 2H), 3.16-3.23 (m, 1H), 3.35-3.52 (m, 3H), 3.67-3.74 (d, 1H), 4.09-4.19 (m, 1H), 4.46-4.51 (dt, 1H), 7.25-7.29 (dd, 1H), 7.63-7.68 (dd, 1H), 8.13-8.17 (d, 1H), 8.65-8.70 (dd, 1H), 8.97-9.00 (dd, 1H).	LCMS (ESI+) calcd for C20H22F3N5O2 (M+H+): 422.18; found: 422.21
ER-899162	 $C_{18}H_{18}N_4O_4$	354.36	0.4280	> 10.0	2-((2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamido)acetic acid	1H NMR (400 MHz, CD3OD) δ ppm: 1.30-1.35 (d, 3H), 2.68-2.76 (dd, 1H), 2.79-2.88 (dd, 1H), 3.35-3.42 (m, 1H), 3.66-3.73 (m, 1H), 3.92-3.97 (m, 2H), 4.11-4.20 (m, 1H), 4.49-4.55 (dd, 1H), 7.23-7.28 (d, 1H), 7.62-7.67 (dd, 1H), 8.12-8.16 (d, 1H), 8.64-8.69 (dd, 1H), 8.95-8.99 (dd, 1H).	LCMS (ESI+) calcd for C18H18N4O4 (M+H+): 355.14; found: 355.22
ER-899191	 $C_{20}H_{21}N_5O_3$	379.42	0.0920	> 10.0	1-((2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carbonyl)azetidine-3-carboxamide	δ 1.15, (d, 3H), 2.60, (t, 1H), 2.84, (t, 1H), 3.29, (m, 1H), 3.41, (d, 1H), 3.83, (m, 1H), 3.94, (m, 2H), 4.29, (m, 1H), 4.39, (m, 1H), 4.49, (m, 1H), 7.02, (s, 1H), 7.21, (d, 1H), 7.44, (s, 1H), 7.64, (dd, 1H), 8.20, (d, 1H), 8.54, (d, 1H), 9.01, (d, 1H)	
ER-899192	 $C_{23}H_{28}ClN_5O_2$	379.42	0.0780	0.365	5-((2R,6R)-2-methyl-6-(2,7-diazaspiro[4.4]nonane-2-carbonyl)morpholino)quinoline-8-carbonitrile hydrochloride	δ 1.15, (d, 3H), 1.87, (m, 4H), 2.63, (m, 1H), 2.95, (m, 1H), 3.09, (m, 2H), 3.23, (m, 2H), 3.35, (m, 4H), 3.56, (m, 1H), 3.67, (m, 1H), 3.99, (m, 1H), 4.59, (d, 1H), 7.22, (d, 1H), 7.64, (m, 1H), 8.21, (d, 1H), 8.55, (d, 1H), 9.01, (d, 1H), 9.21, (br s, 2H)	
ER-899193	 $C_{25}H_{32}ClN_5O_2$	470.01	0.0192	0.087	5-((2R,6R)-2-methyl-6-(3,9-diazaspiro[5.5]undecane-3-carbonyl)morpholino)quinoline-8-carbonitrile hydrochloride	δ 1.15, (d, 3H), 2.65, (t, 1H), 2.97, (t, 1H), 3.03, (m, 2H), 3.18, (m, 1H), 3.35, (m, 2H), 3.64, (m, 2H), 3.79, (m, 2H), 4.00, (m, 10H), 4.74, (d, 1H), 7.23, (d, 1H), 7.63, (dd, 1H), 8.22, (d, 1H), 8.55, (d, 1H), 9.01, (d, 1H), 9.22, (br s, 2H)	

FIG. 6ZZZ

ER-899196	$C_{22}H_{20}N_6O_3$	416.44	0.0640	> 10.0	(2R,6R)-N-(3-carbamoylpyridin-4-yl)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide	δ 1.26, (d, 3H), 2.68, (t, 1H), 2.89, (t, 1H), 3.39, (d, 1H), 3.62, (d, 1H), 4.14, (m, 1H), 4.66, (d, 1H), 7.26, (d, 1H), 7.67, (dd, 1H), 7.96, (s, 1H), 8.22, (d, 1H), 8.39, (m, 1H), 8.49, (ab q, 2H), 8.60, (d, 1H), 8.91, (s, 1H), 9.02, (d, 1H), 12.58, (s, 1H)	
ER-899278	$C_{21}H_{25}N_5O_2$	395.46	0.0020	10.207	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((R)-morpholin-2-ylmethyl)morpholine-2-carboxamide	1H NMR (400 MHz, CD3OD) δ ppm: 1.31-1.34 (d, 3H), 2.45-2.54 (m, 1H), 2.68-2.90 (m, 5H), 3.25-3.42 (m, 3H) (partially overlapped with CD3OD signal), 3.52-3.75 (m, 3H), 3.83-3.89 (m, 1H), 4.09-4.17 (m, 1H), 4.46-4.51 (dd, 1H), 7.24-7.28 (d, 1H), 7.63-7.68 (dd, 1H), 8.12-8.17 (d, 1H), 8.64-8.69 (dd, 1H), 8.96-9.00 (dd, 1H)	LCMS (ESI+) calcd for C21H25N5O3 (M+H+): 396.20; found: 396.33
ER-899282	$C_{21}H_{19}N_5O_2$	373.41	0.0150	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(pyridin-4-yl)morpholine-2-carboxamide	δ 1.24, (d, 3H), 2.68, (t, 1H), 2.96, (t, 1H), 3.38, (d, 1H), 3.58, (d, 1H), 4.09, (m, 1H), 4.58, (d, 1H), 7.26, (d, 1H), 7.63, (d, 2H), 7.66, (dd, 1H), 8.22, (d, 1H), 8.40, (d, 2H), 8.60, (d, 1H), 9.02, (d, 1H), 10.15, (s, 1H)	
ER-899283	$C_{21}H_{19}N_5O_2$	373.41	0.0680	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(pyridin-3-yl)morpholine-2-carboxamide	δ 1.25, (d, 3H), 2.68, (t, 1H), 2.95, (t, 1H), 3.39, (d, 1H), 3.59, (d, 1H), 4.09, (m, 1H), 4.59, (d, 1H), 7.26, (d, 1H), 7.32, (q, 1H), 7.66, (dd, 1H), 8.03, (d, 1H), 8.22, (d, 1H), 8.25, (d, 1H), 8.60, (d, 1H), 8.78, (s, 1H), 9.02, (d, 1H), 9.98, (s, 1H)	
ER-899285	HCl $C_{24}H_{28}ClN_7O_2$	481.99	0.0110	1.264	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(1-(piperidin-4-yl)-1H-pyrazol-4-yl)morpholine-2-carboxamide hydrochloride	δ 1.24, (d, 3H), 2.07, (m, 5H), 2.65, (t, 1H), 2.84, (t, 1H), 2.97, (m, 2H), 3.37, (d, 1H), 3.57, (d, 1H), 4.07, (m, 1H), 4.40, (m, 1H), 4.51, (d, 1H), 7.24, (d, 1H), 7.58, (s, 1H), 7.66, (dd, 1H), 7.93, (s, 1H), 8.21, (d, 1H), 8.58, (d, 1H), 8.69, (br s, 1H), 8.89, (br s, 1H), 9.02, (d, 1H), 9.90, (s, 1H)	
ER-899286	HCl $C_{22}H_{24}ClN_7O_2$	453.93	0.0480	1.071	(2R,6R)-N-(1-(azetidin-3-yl)-1H-pyrazol-4-yl)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide hydrochloride	δ 1.24, (d, 3H), 2.66, (t, 1H), 2.84, (t, 1H), 3.37, (d, 1H), 3.57, (d, 1H), 4.07, (m, 1H), 4.25, (m, 3H), 4.54, (d, 1H), 5.36, (m, 1H), 7.24, (d, 1H), 7.66, (dd, 1H), 7.75, (s, 1H), 8.10, (s, 1H), 8.22, (d, 1H), 8.59, (d, 1H), 9.02, (d, 1H), 9.13, (br s, 2H), 9.98, (s, 1H)	
ER-899287	$C_{20}H_{20}N_6O_2$	376.42	0.0300	> 10.0	(2R,6R)-N-((1H-pyrazol-5-yl)methyl)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide	δ 1.19, (d, 3H), 2.63, (t, 1H), 2.77, (t, 1H), 3.34, (d, 1H), 3.54, (d, 1H), 4.01, (m, 1H), 4.26, (m, 2H), 4.40, (d, 1H), 6.06, (s, 1H), 7.22, (d, 1H), 7.66, (dd, 1H), 8.08, (m, 1H), 8.20, (d, 1H), 8.56, (d, 1H), 9.01, (d, 1H), 12.51, (s, 1H)	

FIG. 6AAAA

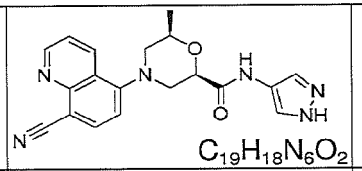
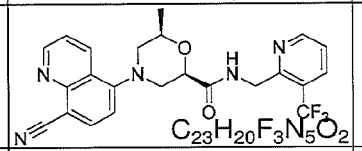
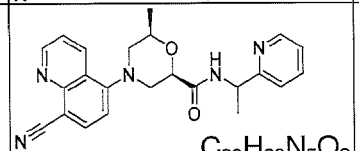
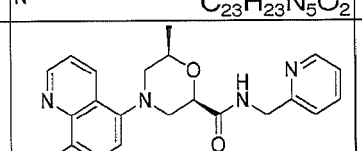
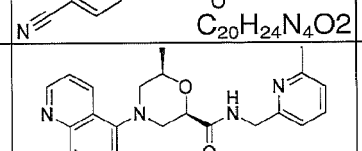
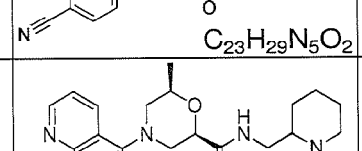
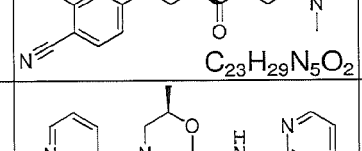
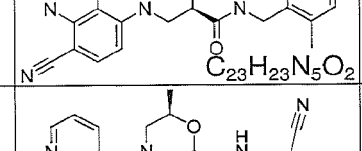
ER-899288	 $C_{19}H_{18}N_6O_2$	376.42	0.1460	> 10.0	(2R,6R)-N-((1H-pyrazol-4-yl)methyl)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide	δ 1.25, (d, 3H), 2.66, (t, 1H), 2.86, (t, 1H), 3.37, (d, 1H), 3.58, (d, 1H), 4.07, (m, 1H), 4.50, (d, 1H), 7.24, (d, 1H), 7.67, (dd, 1H), 7.72, (m, 1H), 8.21, (d, 1H), 8.58, (d, 1H), 9.01, (d, 1H), 9.80, (s, 1H), 12.55, (s, 1H)	
ER-899289	 $C_{23}H_{20}F_3N_5O_2$	455.44	0.0480	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((3-(trifluoromethyl)pyridin-2-yl)methyl)morpholine-2-carboxamide	δ 1.23, (d, 3H), 2.67, (t, 1H), 2.80, (t, 1H), 3.37, (d, 1H), 3.56, (d, 1H), 4.07, (m, 1H), 4.49, (d, 1H), 4.57, (m, 2H), 7.23, (d, 1H), 7.51, (m, 1H), 7.66, (dd, 1H), 8.13, (d, 1H), 8.21, (d, 1H), 8.28, (t, 1H), 8.58, (d, 1H), 8.78, (d, 1H), 9.01, (d, 1H)	
ER-899290	 $C_{23}H_{23}N_5O_2$	401.47	0.0550	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(1-(pyridin-2-yl)ethyl)morpholine-2-carboxamide	δ 1.22, (d, 3H), 1.35, (d, 3H), 2.67, (t, 1H), 2.78, (m, 1H), 3.34, (m, 1H), 3.53, (t, 1H), 4.05, (m, 1H), 4.44, (t, 1H), 4.98, (t, 1H), 7.23, (m, 2H), 7.34, (t, 1H), 7.65, (dd, 1H), 7.73, (t, 1H), 8.15, (m, 1H), 8.20, (t, 1H), 8.49, (d, 1H), 8.56, (d, 1H), 9.01, (d, 1H)	
ER-899291	 $C_{20}H_{24}N_4O2$	387.44	0.0530	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(pyridin-2-ylmethyl)morpholine-2-carboxamide	δ 1.22, (d, 3H), 2.66, (t, 1H), 2.80, (t, 1H), 3.36, (d, 1H), 3.57, (d, 1H), 4.06, (m, 1H), 4.37, (d, 2H), 4.47, (d, 1H), 7.23, (m, 3H), 7.66, (dd, 1H), 7.71, (t, 1H), 8.21, (d, 1H), 8.40, (t, 1H), 8.45, (d, 1H), 8.57, (d, 1H), 9.01, (d, 1H)	
ER-899292	 $C_{23}H_{29}N_5O_2$	401.47	0.1060	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((6-methylpyridin-2-yl)methyl)morpholine-2-carboxamide	δ 1.22, (d, 3H), 2.39, (s, 3H), 2.66, (t, 1H), 2.80, (t, 1H), 3.36, (d, 1H), 3.57, (d, 1H), 4.05, (m, 1H), 4.32, (d, 2H), 4.47, (d, 1H), 7.01, (d, 1H), 7.07, (d, 1H), 7.24, (d, 1H), 7.59, (t, 1H), 7.65, (dd, 1H), 8.21, (d, 1H), 8.42, (t, 1H), 8.57, (d, 1H), 9.01, (d, 1H)	
ER-899293	 $C_{23}H_{29}N_5O_2$	407.52	0.0050	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((1-methylpiperidin-2-yl)methyl)morpholine-2-carboxamide	δ 1.13, (m, 2H), 1.20, (d, 3H), 1.33, (m, 1H), 1.45, (m, 2H), 1.59, (m, 1H), 1.92, (m, 2H), 2.14, (s, 3H), 2.62, (m, 1H), 2.70, (m, 2H), 3.07, (m, 2H), 3.34, (d, 1H), 3.52, (d, 1H), 4.02, (m, 1H), 4.38, (d, 1H), 7.22, (d, 1H), 7.48, (br t, 1H), 7.66, (dd, 1H), 8.20, (d, 1H), 8.56, (d, 1H), 9.01, (d, 1H)	
ER-899294	 $C_{23}H_{23}N_5O_2$	401.47	0.1960	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((3-methylpyridin-2-yl)methyl)morpholine-2-carboxamide	δ 1.23, (d, 3H), 2.23, (s, 3H), 2.67, (t, 1H), 2.79, (t, 1H), 3.37, (d, 1H), 3.58, (d, 1H), 4.07, (m, 1H), 4.38, (m, 2H), 4.48, (d, 1H), 7.19, (dd, 1H), 7.23, (d, 1H), 7.55, (d, 1H), 7.66, (dd, 1H), 8.21, (d, 1H), 8.28, (t, 1H), 8.33, (d, 1H), 8.58, (d, 1H), 9.01, (d, 1H)	
ER-899295	 $C_{20}H_{17}N_7O_2$	387.40	0.0320	> 10.0	(2R,6R)-N-(4-cyano-1H-pyrazol-3-yl)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide		

FIG. 6BBBB

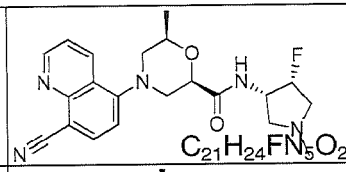
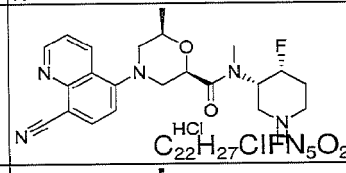
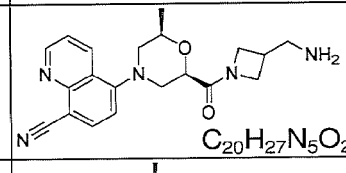
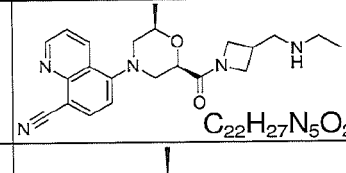
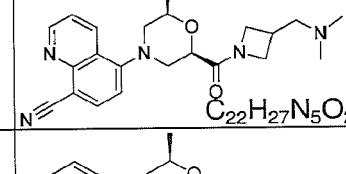
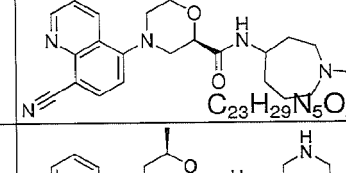
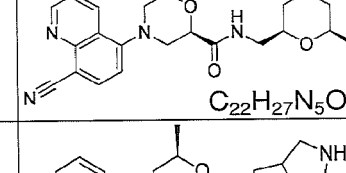
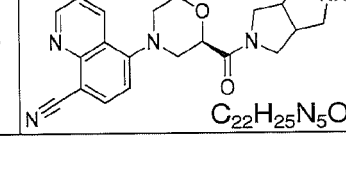
ER-899332	 $C_{21}H_{24}FN_5O_2$	397.45	0.0228	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((3S,4R)-4-fluoro-1-methylpyrrolidin-3-yl)-6-methylmorpholine-2-carboxamide	H NMR (400 MHz, CHLOROFORM-d1) 1.34 (3 H), 2.41 (3 H), 2.67 (2 H), 2.84 (2 H), 2.97 (1 H), 3.30 (1 H), 3.80 (1 H), 4.10 (1 H), 4.46 (1 H), 4.60 (1 H), 5.02 (1 H), 5.16 (1 H), 7.13 (2 H), 7.54 (1 H), 8.05 (1 H), 8.48 (1 H), 9.09 (1 H).	LCMS (ESI+) calcd for C21H24FN5O3 (M+H+): 398.19; found: 398.4
ER-899333	 $C_{22}H_{27}ClFN_5O_2$	447.94	0.0820	7.352	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((3S,4R)-4-fluoropiperidin-3-yl)-N,6-dimethylmorpholine-2-carboxamide hydrochloride	H NMR (400 MHz, METHANOL-d4) d ppm 1.25 (4 H), 1.94 (1 H), 2.30 (2 H), 2.75 (2 H), 2.92 (1H), 3.21 (4 H), 3.53 (6 H), 4.15 (1 H), 7.34 (1 H), 7.74 (1 H), 8.23 (1 H), 8.82 (1 H), 9.00 (1 H).	LCMS (ESI+) calcd for C22H26FN5O2 (M+H+): 412.60; found: 412.21
ER-899334	 $C_{20}H_{27}N_5O_2$	365.43	0.1590	> 10.0	5-((2R,6R)-2-(3-(aminomethyl)azetidine-1-carbonyl)-6-methylmorpholino)quinoline-8-carbonitrile	H NMR (400 MHz, CHLOROFORM-d1) 1.29 (3 H), 1.60 (2 H), 2.68 (1 H), 2.81 (2 H), 2.96 (1 H), 3.29 (1 H), 3.38 (1 H), 3.65 (1 H), 3.74 (1 H), 4.02 (1 H), 4.14 (2 H), 4.50 (1 H), 4.69 (1 H), 7.12 (1 H), 7.53 (1 H), 8.06 (1 H), 8.46 (1 H), 9.09 (1 H).	LCMS (ESI+) calcd for C20H23N5O3 (M+H+): 366.19; found: 366.26
ER-899335	 $C_{22}H_{27}N_5O_2$	393.49	0.0153	17.740	5-((2R,6R)-2-(3-((ethylamino)methyl)azetidine-1-carbonyl)-6-methylmorpholino)quinoline-8-carbonitrile	H NMR (400 MHz, CHLOROFORM-d1) d ppm 1.15 (4 H), 1.22 (1 H), 1.30 (3 H), 2.70 (2 H), 2.92 (3 H), 3.29 (1 H), 3.39 (1 H), 3.65 (1 H), 3.74 (1 H), 4.02 (1 H), 4.13 (2 H), 4.52 (2 H), 7.11 (1 H), 7.53 (1 H), 8.05 (1 H), 8.45 (1 H), 9.09 (1 H).	LCMS (ESI+) calcd for C22H27N5O2 (M+H+): 394.22; found: 394.22
ER-899336	 $C_{22}H_{27}N_5O_2$	393.49	0.0373	> 10.0	5-((2R,6R)-2-(3-((dimethylamino)methyl)azetidine-1-carbonyl)-6-methylmorpholino)quinoline-8-carbonitrile		LCMS (ESI+) calcd for C22H27N5O2 (M+H+): 394.22; found: 394.22
ER-899337	 $C_{23}H_{29}N_5O_2$	407.52	0.0030	7.386	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(1-methylazepan-4-yl)morpholine-2-carboxamide	H NMR (400 MHz, CHLOROFORM-d1) 1.30 (3 H), 1.80 (7 H), 2.39 (3 H), 2.54 (2 H), 2.98 (3 H), 3.28 (1 H), 3.79 (1 H), 4.07 (1 H), 4.17 (1 H), 4.37 (1 H), 7.06 (2 H), 7.51 (1 H), 8.02 (1 H), 8.46 (1 H), 9.06 (1 H).	LCMS (ESI+) calcd for C23H29N5O2 (M+H+): 408.24; found: 408.1
ER-899366	 $C_{22}H_{27}N_5O_2$	409.49	0.0030	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(((2R,6R)-6-methylmorpholin-2-yl)methyl)morpholine-2-carboxamide	1H NMR (400 MHz, CD3OD) δ ppm: 1.11-1.14 (d, 3H), 1.32-1.35 (d, 3H), 2.32-2.47 (m, 2H), 2.69-2.88 (m, 4H), 3.20-3.28 (m, 1H), 3.32-3.42 (m, 2H), 3.55-3.75 (m, 3H), 4.11-4.19 (m, 1H), 4.47-4.53 (dd, 1H), 7.25-7.29 (d, 1H), 7.63-7.68 (dd, 1H), 8.13-8.17 (d, 1H), 8.65-8.70 (dd, 1H), 8.97-9.00 (dd, 1H).	LCMS (ESI+) calcd for C22H27N5O3 (M+H+): 410.21; found: 410.3
ER-899367	 $C_{22}H_{25}N_5O_2$	391.47	0.1190	0.684	5-((2R,6R)-2-methyl-6-(octahydropyrrolo[3,4-c]pyrrole-2-carbonyl)morpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, CD3OD) δ ppm: 1.25-1.30 (dd, 3H), 2.65-2.75 (t, 1H), 2.75-3.10 (m, 5H), 3.15-3.25 (m, 2H), 3.35-3.55 (m, 3H), 3.55-3.70 (m, 2H), 3.80-3.84 (m, 1H), 4.08-4.20 (m, 1H), 4.67-4.74 (d, 1H), 7.25-7.30 (d, 1H), 7.60-7.65 (dd, 1H), 8.13-8.18 (d, 1H), 8.63-8.69 (d, 1H), 8.95-8.99 (d, 1H).	LCMS (ESI+) calcd for C22H25N5O2 (M+H+): 392.20; found: 392.36

FIG. 6CCCC

ER-899414	$C_{21}H_{26}ClN_5O_2$	415.92	0.0130	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((R)-pyrrolidin-2-ylmethyl)morpholine-2-carboxamide hydrochloride	δ 1.21, (d, 3H), 1.56, (m, 1H), 1.81, (m, 2H), 1.92, (m, 1H), 2.62, (t, 1H), 2.78, (t, 1H), 3.10, (m, 2H), 3.36, (m, 4H), 3.53, (d, 1H), 4.03, (m, 1H), 4.40, (d, 1H), 7.22, (d, 1H), 7.66, (dd, 1H), 8.19, (m, 1H), 8.22, (d, 1H), 8.56, (d, 1H), 8.61, (br s, 1H), 9.02, (d, 1H), 9.20, (br s, 1H)
ER-899415	$C_{22}H_{28}ClN_5O_2$	429.95	0.0050	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((S)-piperidin-2-ylmethyl)morpholine-2-carboxamide hydrochloride	δ 1.22, (d, 3H), 1.35, (m, 2H), 1.53, (m, 1H), 1.69, (m, 3H), 2.64, (t, 1H), 2.80, (m, 2H), 3.07, (m, 1H), 3.18, (d, 1H), 3.31, (m, 3H), 4.03, (m, 1H), 4.41, (d, 1H), 7.22, (d, 1H), 7.66, (dd, 1H), 8.13, (t, 1H), 8.23, (d, 1H), 8.44, (br s, 1H), 8.57, (d, 1H), 8.66, (br s, 1H), 9.02, (d, 1H)
ER-899416	$C_{23}H_{28}ClN_5O_2$	441.96	0.0040	> 10.0	(2R,6R)-N-((1R,3r,5S)-8-azabicyclo[3.2.1]octan-3-yl)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide hydrochloride	δ 1.17, (d, 3H), 1.94, (m, 4H), 2.10, (m, 4H), 2.61, (t, 1H), 2.81, (t, 1H), 3.36, (d, 1H), 3.45, (d, 1H), 3.80, (m, 1H), 3.87, (m, 2H), 4.01, (m, 1H), 4.41, (d, 1H), 7.22, (d, 1H), 7.65, (dd, 1H), 7.71, (d, 1H), 8.21, (d, 1H), 8.58, (d, 1H), 8.71, (br s, 1H), 8.89, (br s, 1H), 9.01, (d, 1H)
ER-899417	$C_{23}H_{28}ClN_5O_2$	429.95	0.0002		(2R,6R)-N-(azepan-4-yl)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide hydrochloride	δ 1.20, (d, 3H), 1.61, (m, 2H), 1.84, (m, 4H), 2.62, (t, 1H), 2.76, (t, 1H), 2.96, (m, 2H), 3.12, (m, 2H), 3.33, (d, 1H), 3.48, (d, 1H), 3.86, (m, 1H), 4.00, (m, 1H), 4.34, (d, 1H), 7.21, (d, 1H), 7.65, (dd, 1H), 7.80, (d, 1H), 8.21, (d, 1H), 8.56, (d, 1H), 8.78, (br s, 1H), 8.89, (br s, 1H), 9.01, (d, 1H)
ER-899418	$C_{22}H_{28}ClN_5O_2$	413.91	0.0200	> 10.0	(2R,6R)-N-((1R,5S,6s)-3-azabicyclo[3.1.0]hexan-6-yl)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide hydrochloride	δ 1.17, (d, 3H), 1.91, (m, 2H), 2.60, (t, 1H), 2.76, (m, 2H), 3.27, (m, 4H), 3.33, (d, 1H), 3.47, (d, 1H), 3.98, (m, 1H), 4.33, (d, 1H), 7.20, (d, 1H), 7.65, (dd, 1H), 8.02, (d, 1H), 8.21, (d, 1H), 8.55, (d, 1H), 8.81, (br s, 1H), 9.01, (d, 1H), 9.38, (br s, 1H)
ER-899431	$C_{21}H_{18}N_4O_2$	310.36	0.0880	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N,6-dimethylmorpholine-2-carboxamide	1H NMR (400 MHz, CHLOROFORM-d) d ppm 1.26 (t, J=7.15 Hz, 1 H) 1.30 - 1.35 (m, 3 H) 1.87 (br. s., 1 H) 2.04 (s, 1 H) 2.67 (dd, J=11.92, 10.32 Hz, 1 H) 2.76 (dd, J=11.94, 10.95 Hz, 1 H) 2.88 (d, J=5.00 Hz, 3 H) 3.30 (dt, J=11.96, 2.01 Hz, 1 H) 3.81 (dt, J=12.09, 2.27 Hz, 1 H) 4.02 - 4.19 (m, 2 H) 4.43 (dd, J=10.74, 2.57 Hz, 1 H) 6.72 (d, J=4.50 Hz, 1 H) 7.08 (d, J=8.01 Hz, 1 H) 7.53 (dd, J=8.56, 4.22 Hz, 1 H) 8.03 (d, J=7.97 Hz, 1 H) 8.48 (dd, J=8.56, 1.66 Hz, 1 H) 9.07 (dd, J=4.20, 1.64 Hz, 1 H)	LCMS (ESI+) calcd for C17H18N4O2 (M+H+): 311.15; found: 310.9
ER-899457	$C_{23}H_{29}N_5O_2$	423.51	0.0110	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(((2S,6R)-4,6-dimethylmorpholin-2-yl)methyl)-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, CD3OD) δ ppm 1.14-1.17 (d, 3H), 1.31-1.35 (d, 3H), 1.75-1.88 (m, 2H), 2.28-2.33 (s, 3H), 2.68-2.83 (m, 4H), 3.33-3.41 (m, 2H), 3.60-3.73 (m, 3H), 4.09-4.19 (m, 1H), 4.45-4.52 (dd, 1H), 7.24-7.29 (d, 1H), 7.62-7.68 (dd, 1H), 8.12-8.17 (d, 1H), 8.64-8.69 (dd, 1H), 8.96-9.00 (dd, 1H).	LCMS (ESI+) calcd for C23H29N5O3 (M+H+): 424.23; found: 424.28

FIG. 6DDDD

ER-899459	$C_{23}H_{29}N_5O_2$	407.52	0.0560	> 10.0	5-((2R,6R)-2-(4-(dimethylamino)piperidine-1-carbonyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, CD3OD) δ ppm: 1.23-1.65 (m, 5H), 1.90-2.05 (m, 2H), 2.30-2.36 (d, 6H), 2.45-2.75 (m, 3H), 3.04-3.23 (m, 2H), 3.35-3.50 (m, 2H), 4.10-4.21 (m, 1H), 4.21-4.32 (m, 1H), 4.50-4.60 (m, 1H), 4.75-4.85 (m, 1H), 7.26-7.32 (d, 1H), 7.58-7.67 (m, 1H), 8.13-8.18 (d, 1H), 8.63-8.70 (m, 1H), 8.94-9.00 (m, 1H).	LCMS (ESI+) calcd for C23H29N5O2 (M+H+): 408.24; found: 408.37
ER-899464	$C_{22}H_{27}N_5O_2$	393.49	0.0048	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(1-methylpiperidin-4-yl)morpholine-2-carboxamide	1H NMR (400 MHz, CD3OD) δ ppm: 1.31-1.36 (d, 3H), 1.57-1.70 (m, 2H), 1.79-1.91 (m, 2H), 2.11-2.22 (m, 2H), 2.30 (s, 3H), 2.68-2.93 (m, 4H), 3.35-3.41 (m, 1H), 3.64-3.80 (m, 2H), 4.09-4.18 (m, 1H), 4.43-4.48 (m, 1H), 7.24-7.28 (d, 1H), 7.62-7.68 (dd, 1H), 8.12-8.16 (d, 1H), 8.64-8.68 (m, 1H), 8.96-8.99 (m, 1H).	LCMS (ESI+) calcd for C22H27N5O2 (M+H+): 394.22; found: 394.3
ER-899476	HCl $C_{20}H_{23}ClFN_5O_2$	419.89	0.0050	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((3S,4R)-4-fluoropyrrolidin-3-yl)-6-methylmorpholine-2-carboxamide hydrochloride	δ 1.21, (d, 3H), 2.63, (t, 1H), 2.80, (t, 1H), 3.24, (m, 2H), 3.45, (m, 4H), 4.03, (m, 1H), 4.45, (t, 1H), 5.10, (m, 1H), 5.23, (m, 1H), 7.23, (d, 1H), 7.65, (dd, 1H), 8.12, (t, 1H), 8.21, (d, 1H), 8.57, (d, 1H), 9.02, (dd, 1H), 9.26, (br s, 1H), 9.59, (br s, 1H)	
ER-899477	HCl $C_{21}H_{25}ClN_5O_2$	433.91	0.0160	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((3S,4R)-4-fluoropiperidin-3-yl)-6-methylmorpholine-2-carboxamide hydrochloride	δ 1.20, (d, 3H), 2.08, (m, 2H), 2.65, (t, 1H), 2.81, (t, 1H), 2.89, (m, 1H), 3.12, (m, 3H), 3.35, (d, 1H), 3.48, (d, 1H), 4.02, (m, 1H), 4.45, (d, 1H), 4.79, (m, 1H), 4.92, (m, 1H), 7.22, (d, 1H), 7.66, (dd, 1H), 7.99, (d, 1H), 8.22, (d, 1H), 8.57, (d, 1H), 8.99, (br s, 1H), 9.02, (d, 1H), 9.07, (br s, 1H	
ER-899479	HCl $C_{22}H_{26}ClN_5O_2$	427.93	0.0070	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(2-azaspiro[3.3]heptan-6-yl)morpholine-2-carboxamide hydrochloride	δ 1.19, (d, 3H), 1.97, (m, 1H), 2.11, (m, 1H), 2.23, (m, 2H), 2.60, (t, 1H), 2.71, (t, 1H), 3.33, (d, 1H), 3.47, (d, 1H), 3.81, (m, 2H), 3.93, (m, 2H), 4.00, (m, 1H), 4.09, (m, 1H), 4.30, (d, 1H), 7.21, (d, 1H), 7.65, (dd, 1H), 7.96, (d, 1H), 8.03, (br s, 1H), 8.21, (d, 1H), 8.55, (d, 1H), 8.77, (br s, 1H), 9.01, (d, 1H)	
ER-899481	$C_{23}H_{28}N_6O_3$	436.51	0.0150	> 10.0	(2R,6R)-N-(1-(2-amino-2-oxoethyl)piperidin-4-yl)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, CDCl3) δ ppm: 1.33-1.37 (d, 3H), 1.65-1.75 (m, 2H), 1.97-2.10 (m, 2H), 2.45-2.58 (m, 2H), 2.65-2.80 (m, 2H), 2.98-3.08 (m, 2H), 3.15-3.22 (s, 2H), 3.27-3.35 (d, 1H), 3.76-3.84 (d, 1H), 3.87-3.95 (m, 1H), 4.05-4.16 (m, 1H), 4.40-4.45 (dd, 1H), 5.99-6.05 (m, 1H), 6.58-6.65 (d, 1H), 7.08-7.13	LCMS (ESI+) calcd for C23H28N6O2 (M+H+): 437.23; found: 437.34
ER-899588	$C_{21}H_{25}N_5O_2$	379.46	0.1170	1.376	5-((2R,6R)-2-(4-aminopiperidine-1-carbonyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, CD3OD) δ ppm: 1.20-1.60 (m, 5H), 1.85-2.03 (m, 2H), 2.65-2.85 (m, 2H), 2.95-3.25 (m, 2H), 3.35-3.50 (m, 2H), 3.55-3.75 (m, 1H), 4.10-4.25 (m, 2H), 4.35-4.55 (m, 1H), 4.75-4.85 (m, 1H), 7.25-7.32 (d, 1H), 7.60-7.66 (m, 1H), 8.13-8.19 (d, 1H), 8.62-8.70 (m, 1H), 8.95-9.00 (m, 1H).	LCMS (ESI+) calcd for C21H25N5O2 (M+H+): 380.20; found: 380.33

FIG. 6EEE

ER-899608	$C_{22}H_{27}N_5O_2$	393.49	0.1041	7.040	5-((2R,6R)-2-(4-amino-4-methylpiperidine-1-carbonyl)-6-methylmorpholino)quinoline-8-carbonitrile	1H NMR (400 MHz, CD3OD) δ ppm: 1.22-1.30 (m, 6H), 1.50-1.75 (m, 4H), 2.66-2.75 (t, 1H), 3.06-3.14 (dd, 1H), 3.36-3.50 (m, 2H), 3.50-3.60 (m, 1H), 3.60-3.77 (m, 2H), 3.86-3.96 (m, 1H), 4.11-4.22 (m, 1H), 4.78-4.83 (dd, 1H), 7.27-7.32 (d, 1H), 7.60-7.65 (dd, 1H), 8.14-8.19 (d, 1H), 8.65-8.69 (d, 1H), 8.96-8.99 (dd, 1H).	LCMS (ESI+) calcd for C22H27N5O2 (M+H+): 394.22; found: 394.3
ER-899616	HCl $C_{22}H_{28}ClN_5O_2$	429.95	0.0450	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N,6-dimethyl-N-((R)-piperidin-3-yl)morpholine-2-carboxamide hydrochloride	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.29 (d, 3 H) 1.80 - 2.11 (m, 4 H) 2.65 - 2.80 (m, 1 H) 2.89 - 3.02 (m, 2 H) 3.19 (s, 3 H) 3.02 - 3.29 (m, 2 H) 3.36 - 3.47 (m, 1 H) 3.47 - 3.58 (m, 1 H) 4.09 - 4.55 (m, 2 H) 4.76 - 4.95 (m, 1 H) 7.27 - 7.37 (m, 1 H) 7.62 - 7.73 (m, 1 H) 8.14 - 8.24 (m, 1 H) 8.67 - 8.79 (m, 1 H) 8.96 - 9.05 (m, 1 H)	LCMS (ESI+) calcd for C22H27N5O2 (M+H+): 394.22; found: 394.32
ER-899618	HCl $C_{22}H_{21}ClN_6O_3$	452.90	0.0438	> 10.0	(2R,6R)-N-(2-carbamoylpyridin-4-yl)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide hydrochloride	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.41 (d, J=6.20 Hz, 3 H) 2.78 (t, J=10.25 Hz, 1 H) 2.98 (d, J=11.96, 10.68 Hz, 1 H) 3.44 (dt, J=12.12, 2.06 Hz, 1 H) 3.76 (d, J=12.1,1 H) 4.22-4.25 (m, 1 H) 4.68 (dd, J=10.68, 2.56 Hz, 1 H) 7.32 (d, J=8.12 Hz, 1 H) 7.68 (dd, J=8.76, 4.27 Hz, 1 H) 7.94 - 8.00 (m, 1 H) 8.17 (d, J=7.90 Hz, 1 H) 8.36 (s, 1 H) 8.52 (dd, J=5.55, 0.64 Hz, 1 H) 8.71 (dd, J=8.55, 1.71 Hz, 1 H) 9.00 (dd, J=4.27, 1.50 Hz, 1 H)	LCMS (ESI+) calcd for C22H25N6O3 (M+H+): 417.15; found: 417.23
ER-899619	HCl $C_{22}H_{28}ClN_5O_2$	429.95	0.4962	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N,6-dimethyl-N-((S)-piperidin-3-yl)morpholine-2-carboxamide hydrochloride	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.29 (d, 3 H) 1.76 - 2.12 (m, 4 H) 2.68 - 2.77 (m, 1 H) 2.84 - 3.01 (m, 2 H) 3.06 - 3.29 (m, 5 H) 3.32 - 3.62 (m, 2 H) 4.12 - 4.29 (m, 1 H) 4.46 - 4.62 (m, 1 H) 4.79 - 4.85 (m, 1 H) 7.23 - 7.37 (m, 1 H) 7.61 - 7.73 (m, 1 H) 8.15 - 8.20 (m, 1 H) 8.67 - 8.73 (m, 1 H) 8.99 (dd, J=4.27, 1.71 Hz, 1 H)	LCMS (ESI+) calcd for C22H27N5O2 (M+H+): 394.22; found: 394.35
ER-899626	$C_{23}H_{29}N_5O_2$	407.52	0.0027	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(1-ethylpiperidin-4-yl)-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, METHANOL-d4) d ppm 1.30 - 1.38 (m, 6 H) 1.92 (br. s., 2 H) 2.10 (br. s., 2 H) 2.73 (dd, J=12.07, 10.28 Hz, 1 H) 2.81 (dd, J=11.86, 10.83 Hz, 1 H) 3.01 (br. s., 2 H) 3.13 (q, J=7.30 Hz, 2 H) 3.35 (s, 3 H) 3.37 - 3.44 (m, 1 H) 3.54 (d, J=11.33 Hz, 2 H) 3.64 - 3.76 (m, 1 H) 4.01 (s, 1 H) 4.50 (dd, J=10.68, 2.63 Hz, 1 H) 7.27 (d, J=8.05 Hz, 1 H) 7.66 (dd, J=8.58, 4.27 Hz, 1 H) 8.16 (d, J=8.01 Hz, 1 H) 8.42 (s, 1 H) 8.67 (dd, J=8.58, 1.68 Hz, 1 H)	LCMS (ESI+) calcd for C23H29N5O2 (M+H+): 408.24; found: 408.0
ER-899680	$C_{23}H_{29}N_5O_2$	407.52	0.0148	8.784	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(1-ethylpiperidin-3-yl)-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, CD3OD) δ ppm: 1.06-1.13 (m, 3H), 1.30-1.35 (d, 3H), 1.42-1.52 (m, 1H), 1.56-1.67 (m, 1H), 1.70-1.83 (m, 2H), 2.44-2.53 (m, 2H), 2.65-2.88 (m, 4H), 3.35-3.41 (m, 1H), 3.66-3.72 (m, 1H), 3.96-4.04 (m, 1H), 4.09-4.18 (m, 1H), 4.43-4.49 (dd, 1H), 7.24-7.29 (d, 1H), 7.62-7.67 (dd, 1H), 8.12-8.16 (d, 1H), 8.64-8.68 (dd, 1H), 8.96-8.99 (dd, 1H).	LCMS (ESI+) calcd for C23H29N5O2 (M+H+): 408.24; found: 408.36.

FIG. 6FFFF

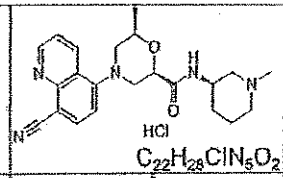
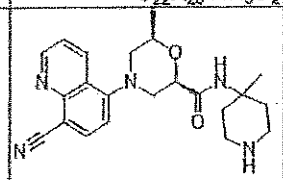
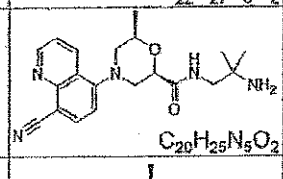
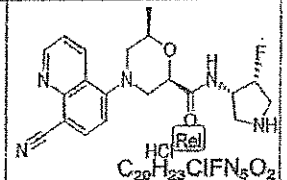
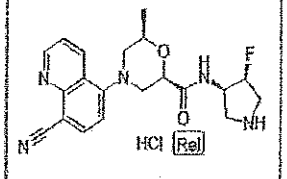
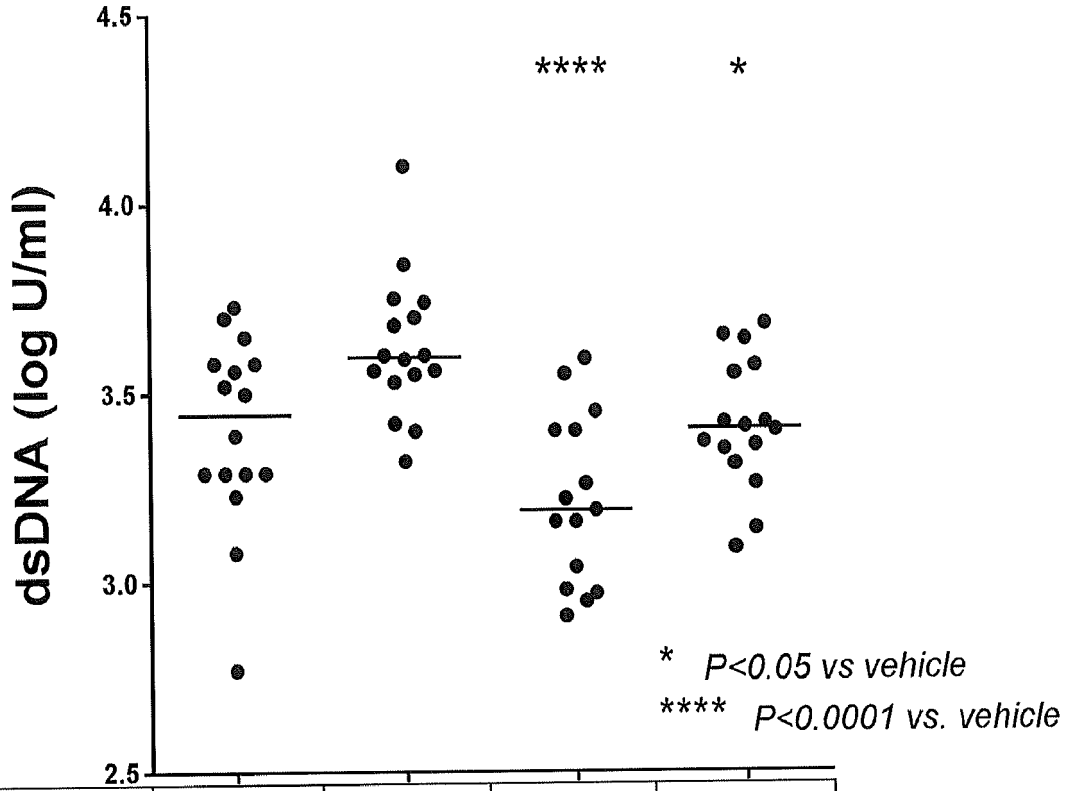
ER-899688	 HCl $C_{22}H_{28}ClN_5O_2$	393.49	0.0082	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-((R)-1-methylpiperidin-3-yl)morpholine-2-carboxamide hydrochloride	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.34 (d, J=6.20 Hz, 3 H) 1.38 - 1.52 (m, 1 H) 1.63 (m, 1 H) 1.68 - 1.85 (m, 2 H) 2.19 (br. s., 2 H) 2.29 (s, 3 H) 2.58 (br. s., 1 H) 2.67 - 2.87 (m, 3 H) 3.49 (d, J=12.67 Hz, 1 H) 3.70 (dt, J=11.96, 2.24 Hz, 1 H) 3.93 - 4.06 (m, 1 H) 4.07 - 4.23 (m, 1 H) 4.47 (dd, J=10.79, 2.67 Hz, 1 H) 7.27 (d, J=7.90 Hz, 1 H) 7.66 (dd, J=8.55, 4.27 Hz, 1 H) 8.15 (d, J=8.12 Hz, 1 H) 8.67 (dd, J=8.55, 1.50 Hz, 1 H) 8.99 (dd, J=4.27, 1.50 Hz, 1 H)	LCMS (ESI+) calcd for C22H27N5O2 (M+H+): 394.22; found: 394.28
ER-899718	 $C_{22}H_{27}N_5O_2$	393.49	0.0030	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(4-methylpiperidin-4-yl)morpholine-2-carboxamide	1H NMR (400 MHz, CHLOROFORM-d) d ppm 1.20 - 1.37 (m, 5 H) 1.46 (s, 3 H) 1.87 - 2.00 (m, 2 H) 2.39 (d, J=12.51 Hz, 2 H) 2.65 - 2.80 (m, 2 H) 2.97 - 3.15 (m, 3 H) 3.17 - 3.38 (m, 3 H) 3.46 (s, 2 H) 3.75 (d, J=12.02 Hz, 1 H) 4.04 - 4.16 (m, 1 H) 4.35 (dd, J=10.72, 2.56 Hz, 1 H) 6.42 (s, 1 H) 7.10 (d, J=8.01 Hz, 1 H) 7.52 (dd, J=8.55, 4.23 Hz, 1 H) 8.03 (d, J=7.97 Hz, 1 H) 8.46 (dd, J=8.56, 1.62 Hz, 1 H) 9.06 (dd, J=4.20, 1.60 Hz, 1 H) .	LCMS (ESI+) calcd for C22H27N5O2 (M+H+): 394.22; found: 393.9
ER-899722	 $C_{20}H_{25}N_5O_2$	367.45	0.0040	> 10.0	(2R,6R)-N-(2-amino-2-methylpropyl)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, METHANOL-d4) d ppm 1.07 (d, 7 H) 1.25 - 1.38 (m, 3 H) 2.64 - 2.86 (m, 3 H) 3.18 (d, 2 H) 3.36 (dt, 1 H) 3.68 (dt, 1 H) 4.13 (m, 1 H) 4.50 (dd, 1 H) 7.23 (d, 1 H) 7.62 (dd, 1 H) .11 (d, 1 H) 8.63 (dd, 1 H) 8.94 (dd, 1 H)	LCMS (ESI+) calcd for C20H25N5O2 (M+H+): 368.20; found: 368.2
ER-899742	 HCl Rel $C_{20}H_{23}ClFN_5O_2$	419.89	0.0059	> 10.0	rel-(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((3S,4R)-4-fluoropyrrolidin-3-yl)-6-methylmorpholine-2-carboxamide hydrochloride	1H NMR (400 MHz, METHANOL-d4) d ppm 1.36 (d, 4 H) 2.59 - 2.80 (m, 1 H) 2.86 (t, 1 H) 3.35 (m, 1 H) 3.38 - 3.48 (m, 1 H) 3.48 - 3.65 (m, 1 H) 3.65 - 3.86 (m, 5 H) 4.16 - 4.21 (m, 1 H) 4.58 (dd, 1 H) 5.23 (t, 1 H) 5.37 (t, 1 H) 7.29 (d, 1 H) 7.68 (dd, 1 H) 8.11 (d, 1 H) 8.17 (d, 1 H) 8.69 (dd, 1 H) 9.01 (dd, 1 H)	LCMS (ESI+) calcd for C20H23FN5O2 (M+H+): 384.15; found: 384.03
ER-899745	 HCl Rel $C_{20}H_{23}ClFN_5O_2$	419.89	0.0081	> 10.0	rel-(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-((3R,4S)-4-fluoropyrrolidin-3-yl)-6-methylmorpholine-2-carboxamide hydrochloride	1H NMR (400 MHz, METHANOL-d4) d ppm 1.35 (d, 4 H) 2.75 (t, 1 H) 2.86 (t, 1 H) 3.43 (d, 2H) 3.59 (t, 1 H) 3.67 - 3.79 (m, 6 H) 4.05 - 4.29 (m, 1 H) 4.59 (dd, 1 H) 7.29 (d, 1 H) 7.70 (dd, 1 H) 8.12 (d, 1 H) 8.18 (d, 1 H) 8.73 (d, 1 H) 9.01 (dd, 1 H)	LCMS (ESI+) calcd for C20H23FN5O2 (M+H+): 384.15; found: 384.06

FIG. 6GGGG

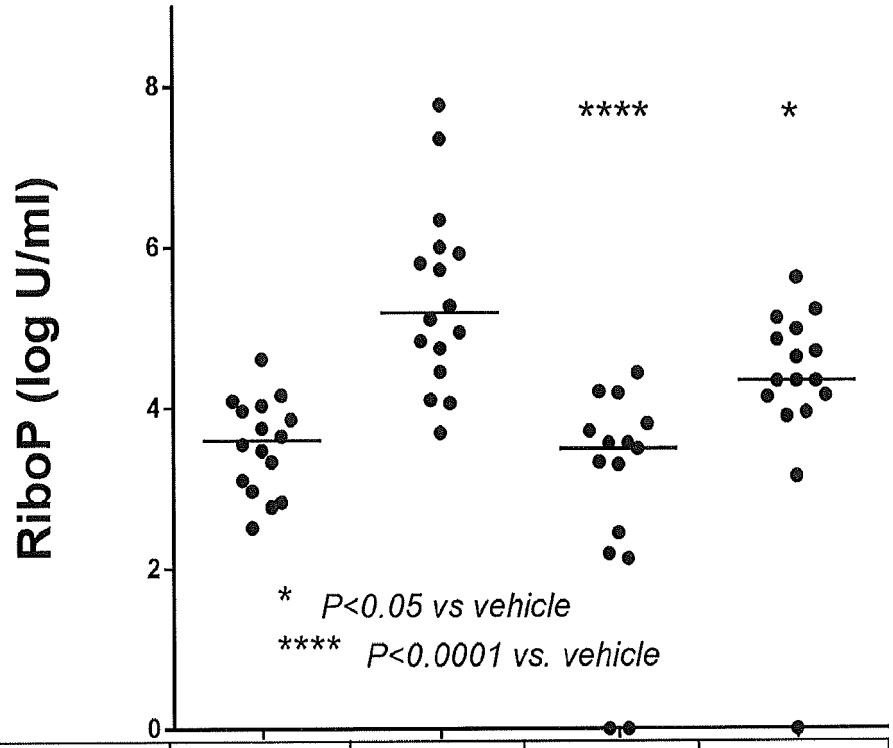
ER-899819	HCl $C_{22}H_{28}ClN_5O_2$	429.95	0.0053	7.490	(2R,6R)-N-(azepan-3-yl)-4-(8-cyanoquinolin-5-yl)-6-methylmorpholine-2-carboxamide hydrochloride	
ER-899820	HCl $C_{23}H_{30}ClN_5O_2$	443.98	0.0083	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-6-methyl-N-(1-methylazepan-3-yl)morpholine-2-carboxamide hydrochloride	
ER-899835	$C_{23}H_{29}N_5O_2$	407.52	0.0661	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(1,4-dimethylpiperidin-4-yl)-6-methylmorpholine-2-carboxamide	1H NMR (400 MHz, CHLOROFORM-d) d ppm 0.84 - 0.91 (m, 1 H) 1.21 - 1.28 (m, 5 H) 1.34 (d, J=6.22 Hz, 3 H) 1.42 (s, 3 H) 1.67 - 1.90 (m, 4 H) 2.05 - 2.17 (m, 2 H) 2.21 (d, J=8.09 Hz, 1 H) 2.31 (s, 3 H) 2.54 - 2.65 (m, 1 H) 2.66 - 2.78 (m, 2 H) 3.30 (d, J=11.90 Hz, 1 H) 3.81 (d, J=12.09 Hz, 1 H) 4.03 - 4.16 (m, 1 H) 4.34 (dd, J=10.72, 2.52 Hz, 1 H) 4.85 - 4.93 (m, 1 H) 6.42 (s, 1 H) 7.09 (d, J=7.97 Hz, 1 H) 7.52 (dd, J=8.55, 4.20 Hz, 1 H) 8.04 (d, J=7.93 Hz, 1 H) 8.47 (dd, J=8.54, 1.37 Hz, 1 H) 9.07 (dd, J=4.04, 1.41 Hz, 1 H)	LCMS (ESI+) calcd for C23H29N5O2 (M+H+): 408.24; found: 408
ER-899836	HCl $C_{22}H_{27}ClFN_5O_2$	447.93	0.3190	> 10.0	(2R,6R)-4-(8-cyanoquinolin-5-yl)-N-(4-fluoro-1-methylpiperidin-3-yl)-6-methylmorpholine-2-carboxamide hydrochloride	^{1}H NMR (400 MHz, METHANOL-d_4) d ppm 1.34 (d, J=6.41 Hz, 3 H) 1.92 - 2.14 (m, 2 H) 2.22 - 2.43 (m, 5 H) 2.58 (br, 1 H) 2.64 - 2.89 (m, 3 H) 3.40 (d, J=12.07 Hz, 1 H) 3.70 (dd, J=11.96, 2.14 Hz, 1 H) 4.09 - 4.28 (m, 2 H) 4.53 (ddd, J=10.74, 3.90, 2.67 Hz, 1 H) 4.65 - 4.86 (m, 1 H) 7.28 (d, J=8.12 Hz, 1 H) 7.66 (dd, J=8.55, 4.27 Hz, 1 H) 8.16 (d, J=8.12 Hz, 1 H) 8.68 (dd, J=8.65, 1.60 Hz, 1 H) 8.99 (dd, J=4.27, 1.71 Hz, 1 H)	LCMS (ESI+) calcd for C22H26FN5O2 (M+H+): 412.18; found: 412.23

FIG. 7(A)



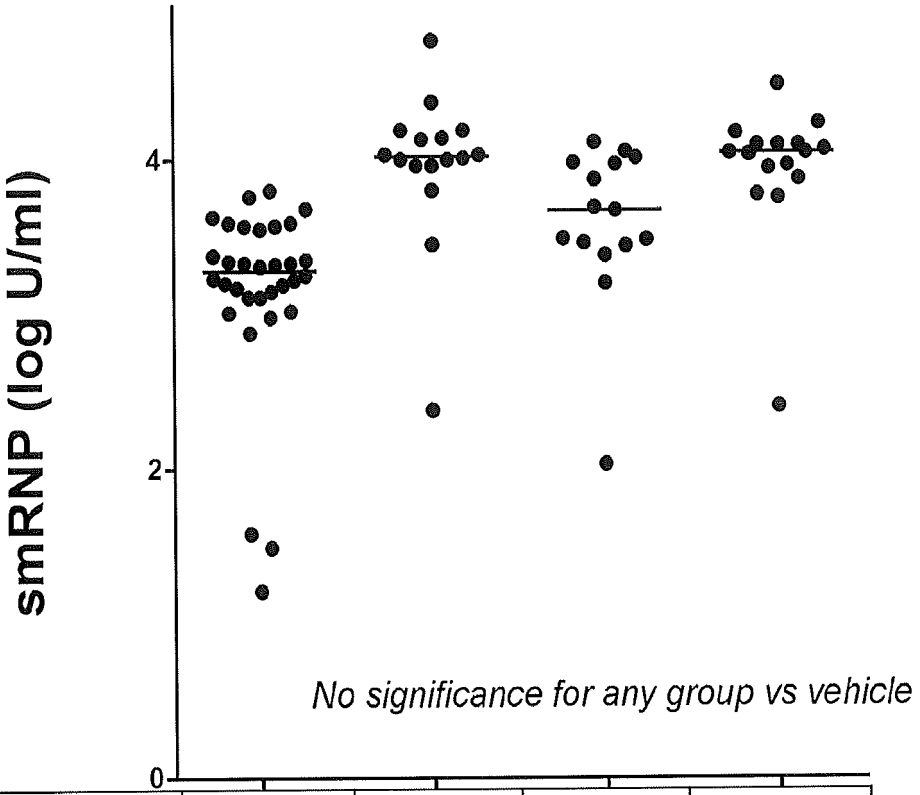
Treatment	Pre-bleed	Veh	-742	-742
Dose (mpk)	---	---	300	33
Duration (wks)	---	14	14	14
Age (wks)	19	34	34	34

FIG. 7(B)



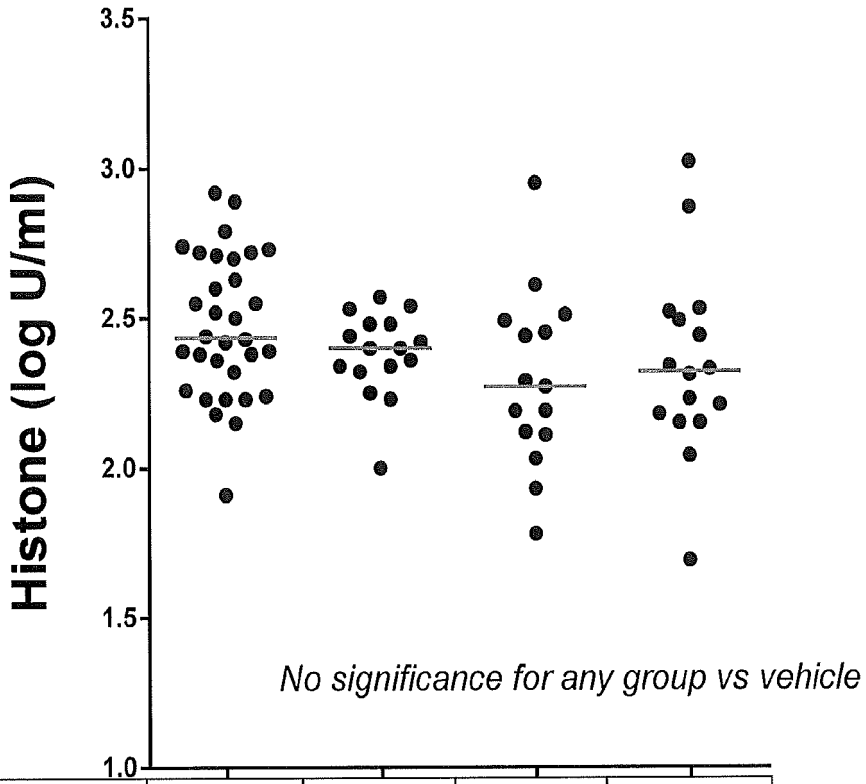
Treatment	Pre-bleed	Veh	-742	-742
Dose (mpk)	---	---	300	33
Duration (wks)	---	14	14	14
Age (wks)	19	34	34	34

FIG. 7(C)



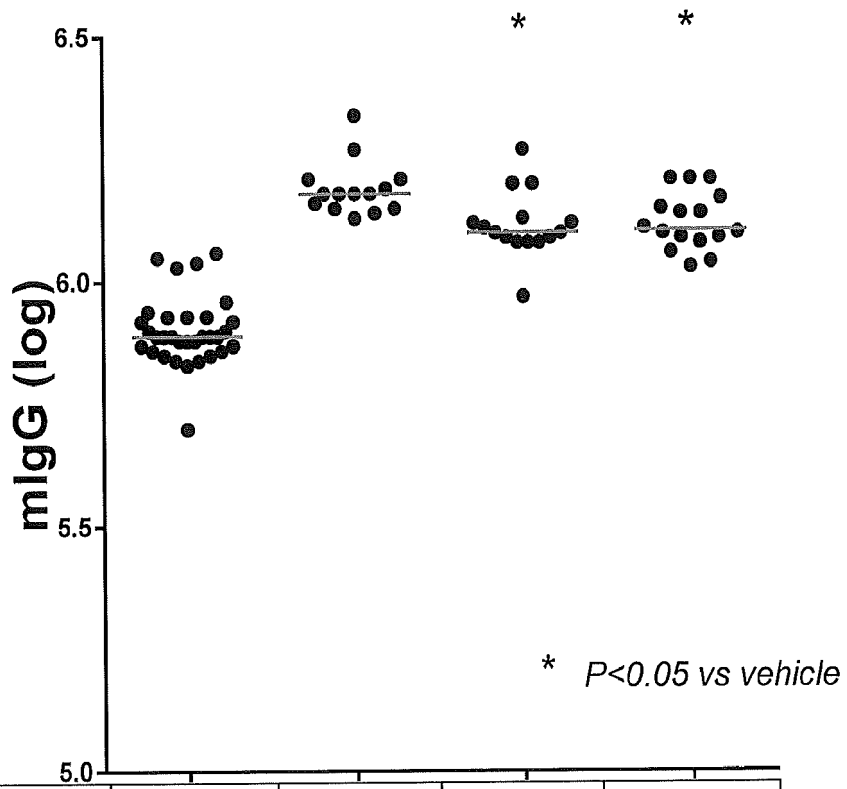
Treatment	Pre-bleed	Veh	-742	-742
Dose (mpk)	---	---	300	33
Duration (wks)	---	14	14	14
Age (wks)	19	34	34	34

FIG. 7(D)



Treatment	Pre-bleed	Veh	-742	-742
Dose (mpk)	---	---	300	33
Duration (wks)	---	14	14	14
Age (wks)	19	34	34	34

FIG. 7(E)



Treatment	Pre-bleed	Veh	-742	-742
Dose (mpk)	---	---	300	33
Duration (wks)	---	14	14	14
Age (wks)	19	34	34	34

FIG. 7(F)

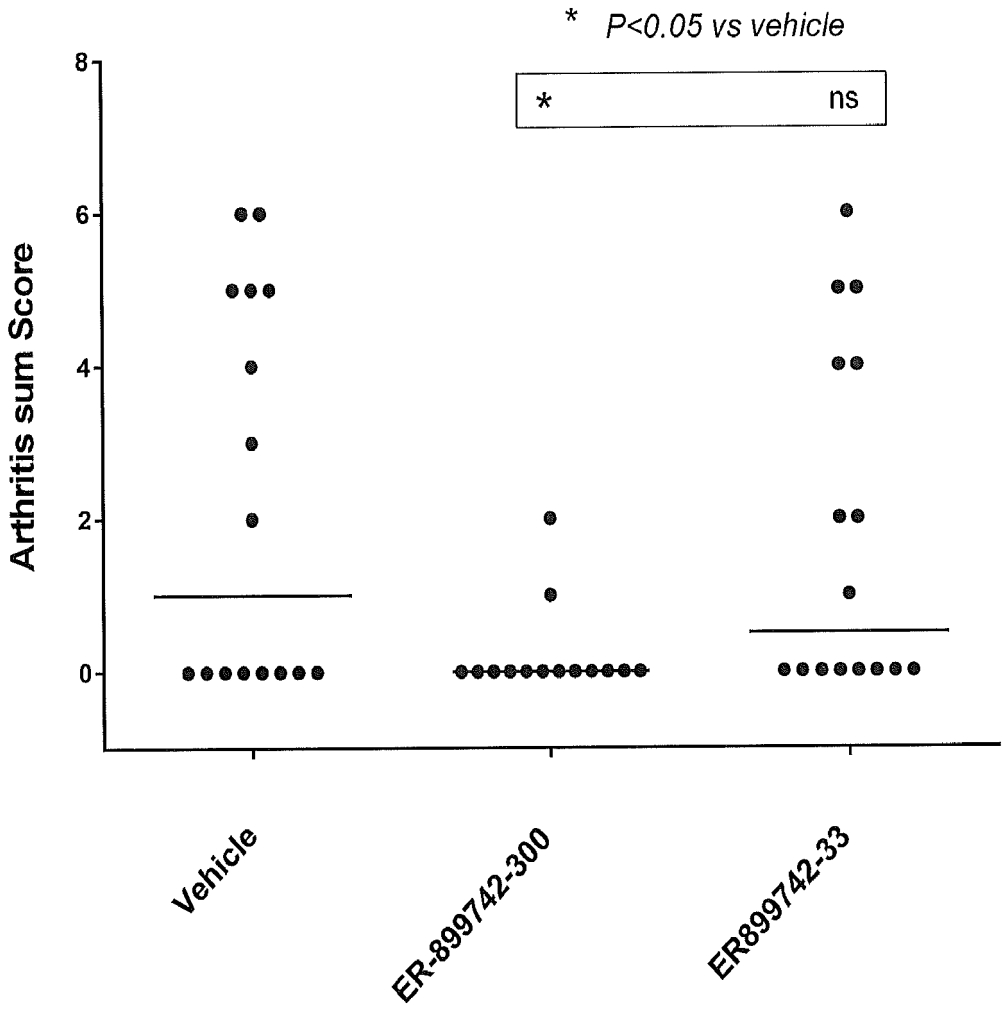
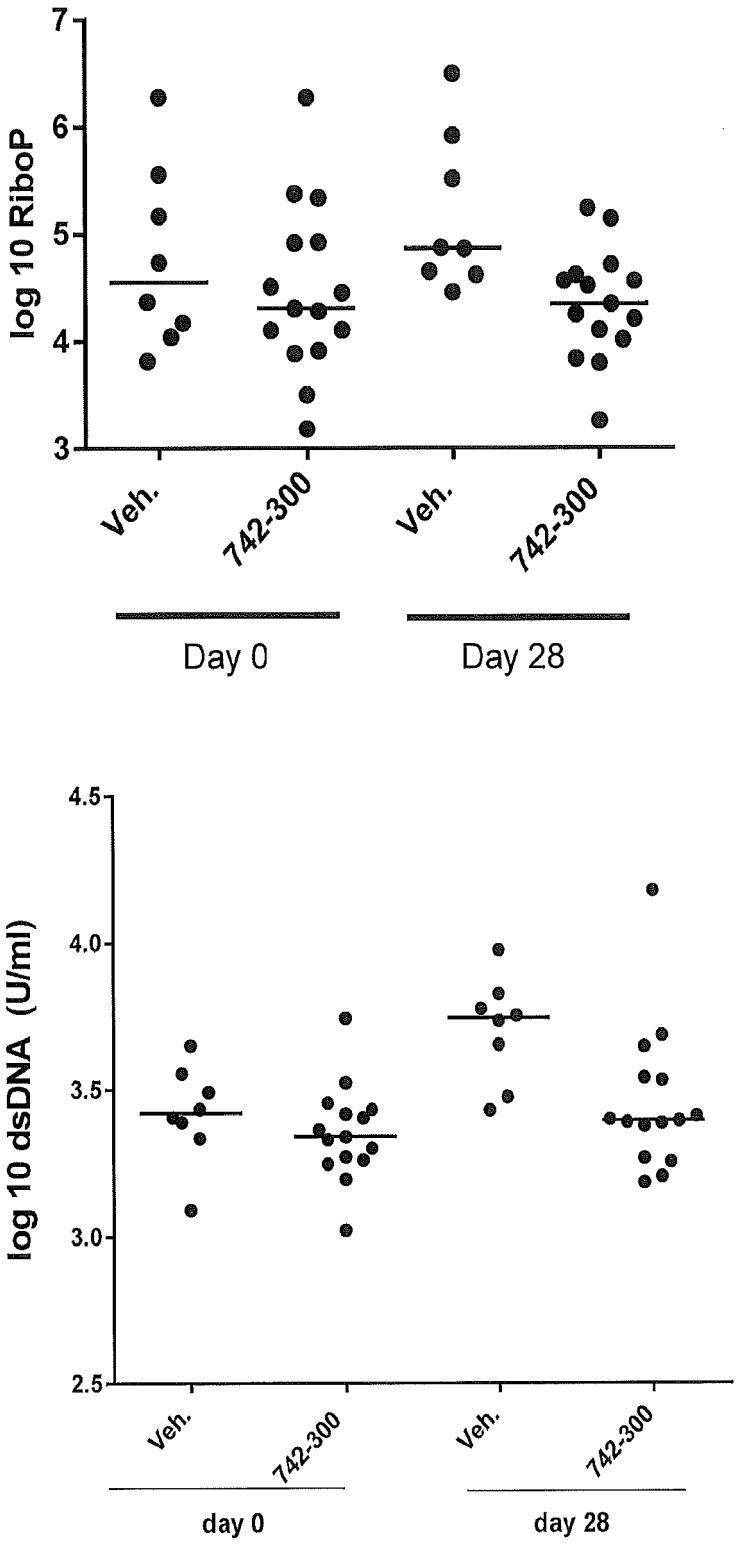

* P<0.05 vs vehicle
*
ns
Arthritis sum Score
8
6
4
2
0
Vehicle
ER-899742-300
ER899742-33

FIG. 7G

Gene Number	Gene Name
1	**Irf7***
2	**Isg15***
3	Fcgr1
4	**Usp18***
5	**Oasl2***
6	Cmpk2
7	Herc6
8	**Ifit1***
9	Oas3
10	Ifi202b
11	Ifit3
12	Ifi27l2a
13	Ddx60
14	Ifi44
15	Xaf1
16	Mx1
17	Ifi204
18	Elane
19	Fpr1
20	Mmp8
21	Ccl2
22	Ms4a6c
23	Cxcl10
24	Ccr2
24 genes were significantly upregulated between Pristane + Vehicle vs. uninduced PBS control (P.adj "FDR" <0.05, at least 1.5 Fold Change)	
* Significantly reduced by 300 mg/kg ER899742 vs. vehicle-treated pristane-induced mice (5 genes) (P.adj "FDR"<0.05, at least 1.5 fold change)	

FIG. 8



No statistically significant change in titer seen in dosed groups over time.

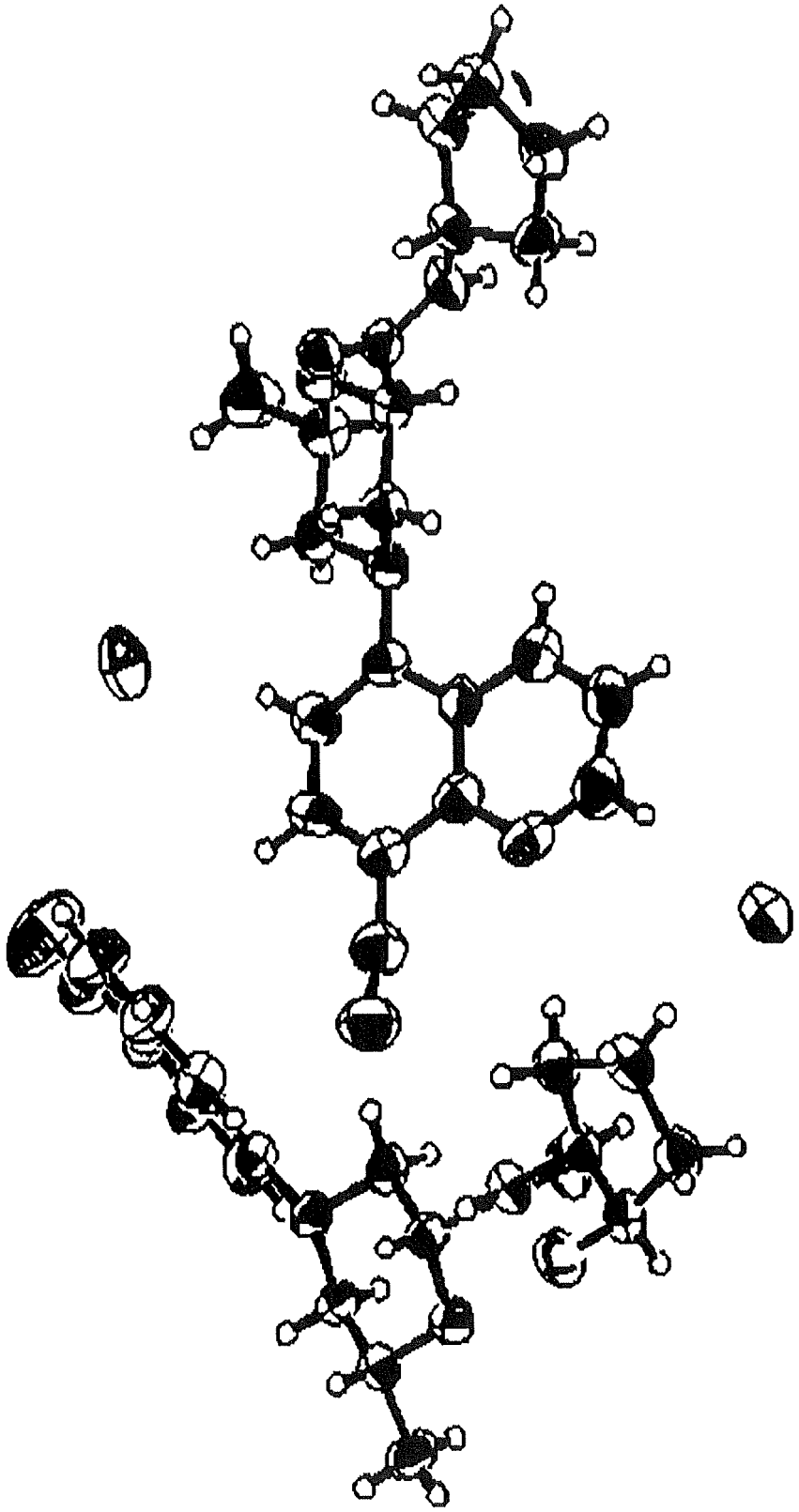


FIG. 9 ORTEP plot of the crystal structure of ER-899742-HCl.