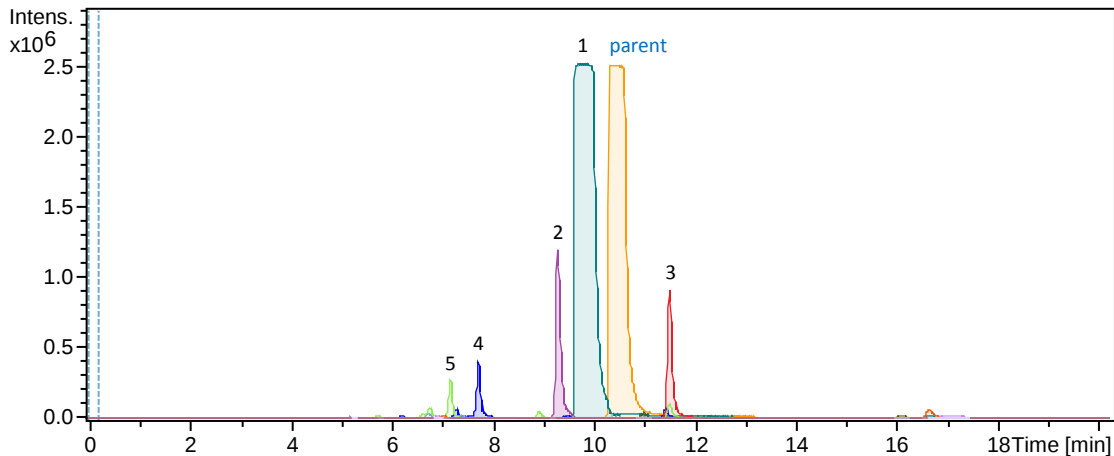
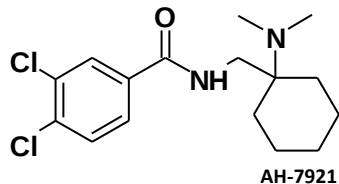
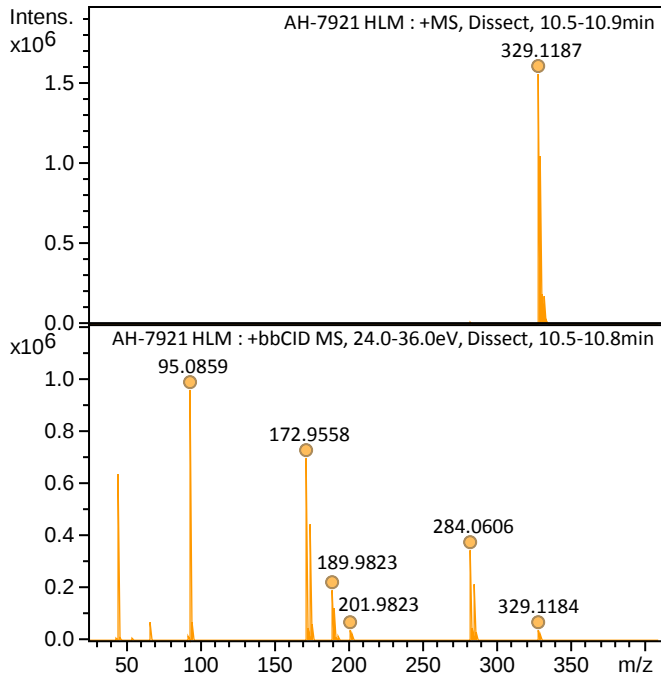


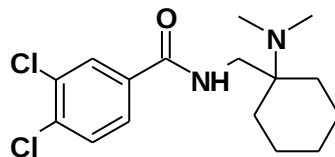
MS-Spectra of *in vitro* phase I metabolites produced in a pooled human liver microsomes (pHLM) assay with subsequent identification by LC-qToF-MS analysis



Parent compound

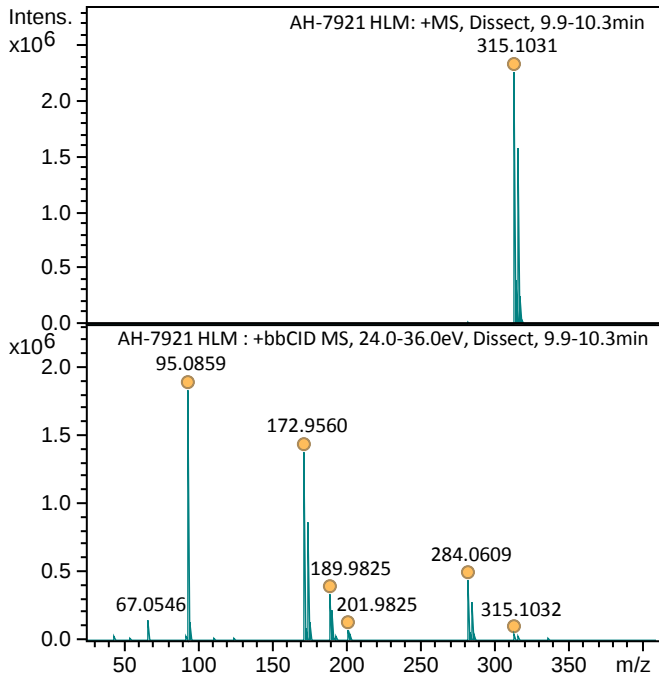


AH-7921

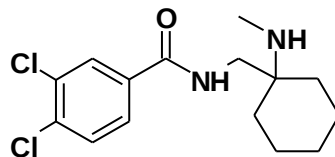


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
67.0545	C5H7	67.0542	-4.3	3.9
95.0859	C7H11	95.0855	-3.7	2.6
172.9558	C7H3Cl2O	172.9555	-1.6	6
189.9823	C7H6Cl2NO	189.9821	-1.1	5
201.9823	C8H6Cl2NO	201.9821	-0.9	26.2
284.0606	C14H16Cl2NO	284.0603	-0.8	17.8
329.1184	C16H23Cl2N2O	329.1182	-0.7	9.7

1. N-dealkylation

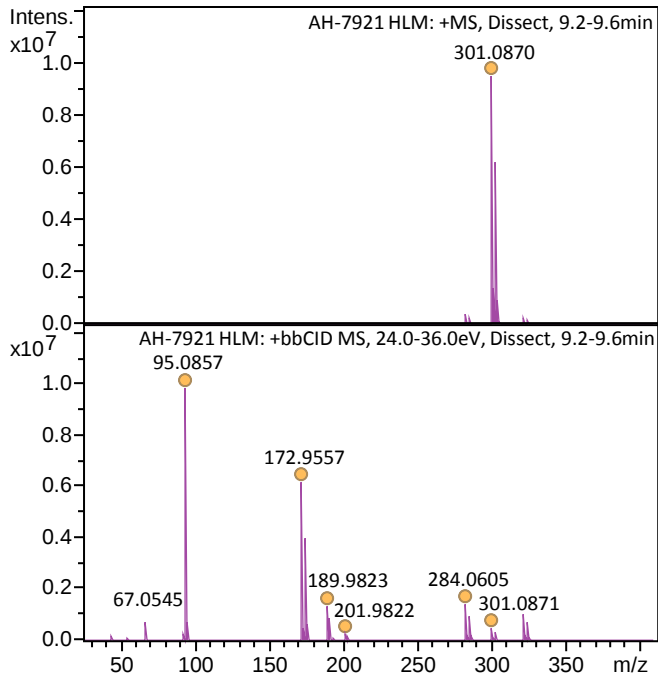


N-demethyl-AH-7921

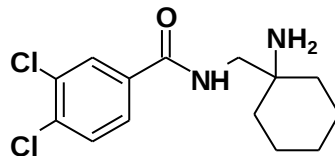


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
67.0546	C5H7	67.0542	-5.5	0.9
95.0859	C7H11	95.0855	-4.3	1.7
172.9560	C7H3Cl2O	172.9555	-2.7	6.4
189.9825	C7H6Cl2NO	189.9821	-2	8.8
201.9825	C8H6Cl2NO	201.9821	-2.1	10.9
284.0609	C14H16Cl2NO	284.0603	-2	18.6
315.1032	C15H21Cl2N2O	315.1025	-1.9	14

2. N-dealkylation

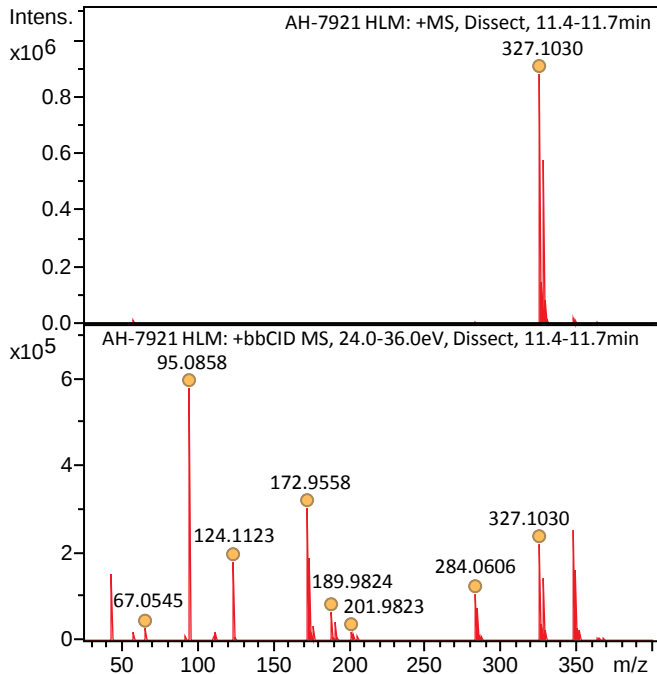


N,N-didemethyl-AH-7921



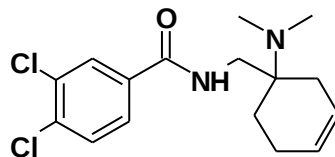
Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
67.0545	C5H7	67.0542	-3.6	0.8
95.0857	C7H11	95.0855	-2.3	2.7
172.9557	C7H3Cl2O	172.9555	-1.1	2.9
189.9823	C7H6Cl2NO	189.9821	-0.9	19.7
201.9822	C8H6Cl2NO	201.9821	-0.7	32.9
284.0605	C14H16Cl2NO	284.0603	-0.6	16.9
301.0871	C14H19Cl2N2O	301.0869	-0.6	14.4

3. Dehydration



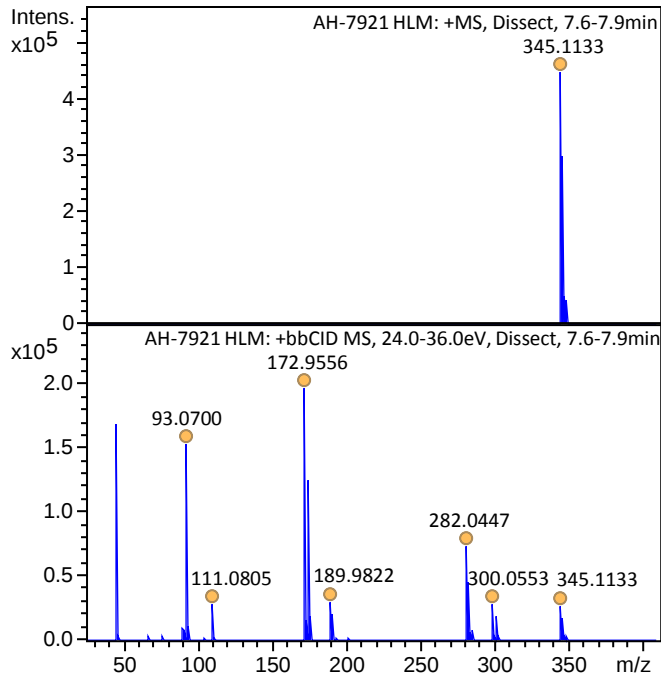
Dehydro-AH-7921

(double-bond position unknown)



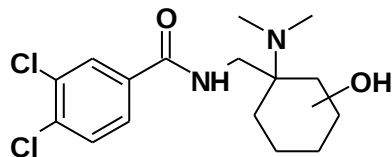
Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
67.0545	C5H7	67.0542	-4	20.1
95.0858	C7H11	95.0855	-2.4	1.2
124.1123	C8H14N	124.1121	-2.1	13.8
172.9558	C7H3Cl2O	172.9555	-1.7	6.8
189.9824	C7H6Cl2NO	189.9821	-1.6	13.1
201.9823	C8H6Cl2NO	201.9821	-1.3	22.1
284.0606	C14H16Cl2NO	284.0603	-1	16.5
327.1030	C16H21Cl2N2O	327.1025	-1.5	6.4

4. Hydroxylation



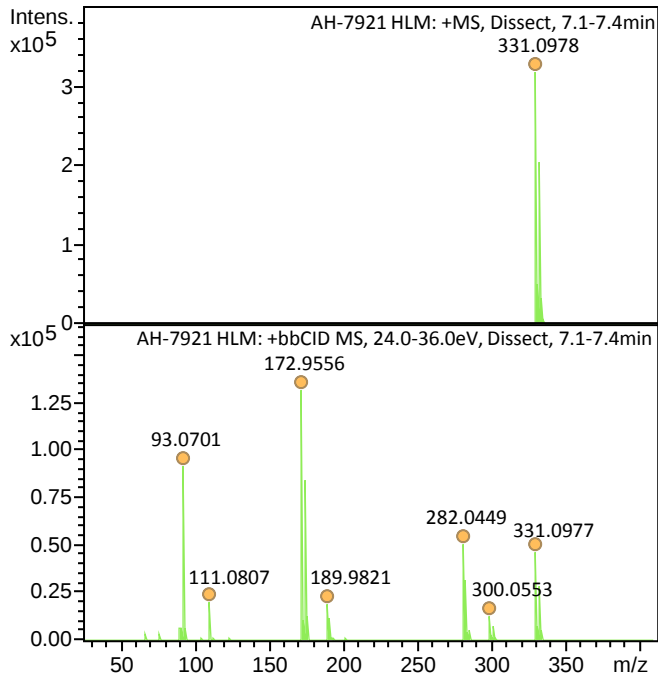
Hydroxy-AH-7921

(cyclohexyl)

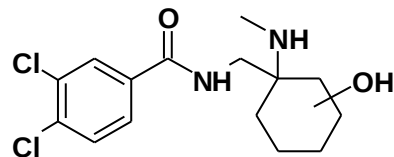


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
77.0385	C6H5	77.0386	0.8	107
93.0700	C7H9	93.0699	-1.5	1.8
111.0805	C7H11O	111.0804	-0.6	9.1
172.9556	C7H3Cl2O	172.9555	-0.2	5.2
189.9822	C7H6Cl2NO	189.9821	-0.6	13.4
282.0447	C14H14Cl2NO	282.0447	0	9.4
300.0553	C14H16Cl2NO2	300.0553	-0.3	8.3
345.1133	C16H23Cl2N2O2	345.1131	-0.5	9

5. *N*-dealkylation + Hydroxylation

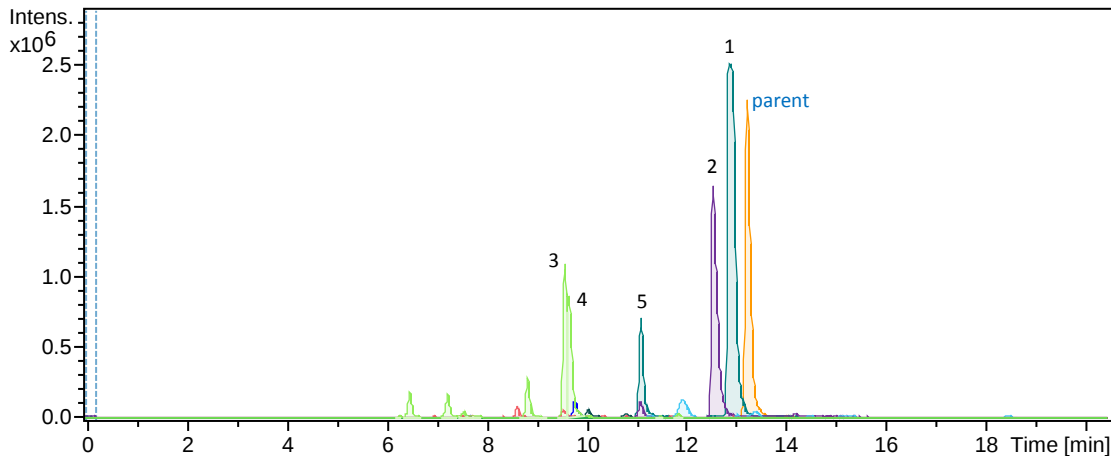
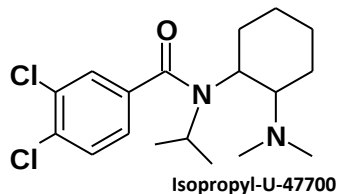


Hydroxy-*N*-demethyl-AH-7921 (cyclohexyl)

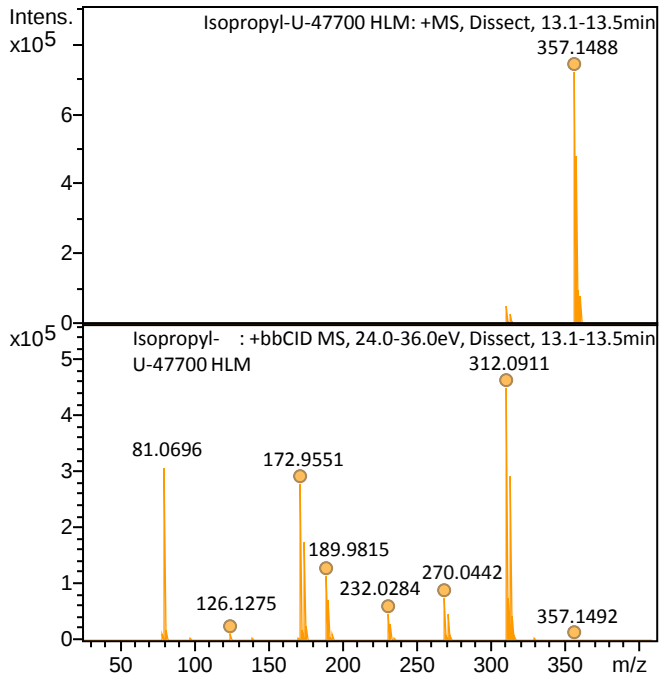


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
93.0701	C7H9	93.0699	-1.9	1.8
111.0807	C7H11O	111.0804	-1.9	18.1
172.9556	C7H3Cl2O	172.9555	-0.5	5.7
189.9821	C7H6Cl2NO	189.9821	0	8.8
282.0449	C14H14Cl2NO	282.0447	-0.8	9.2
300.0553	C14H16Cl2NO2	300.0553	0	18.4
331.0977	C15H21Cl2N2O2	331.0975	-0.6	12.5

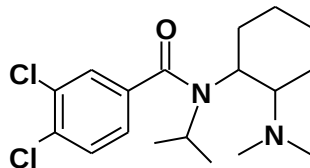
MS-Spectra of *in vitro* phase I metabolites produced in a pooled human liver microsomes (pHLM) assay with subsequent identification by LC-qToF-MS analysis



Parent compound

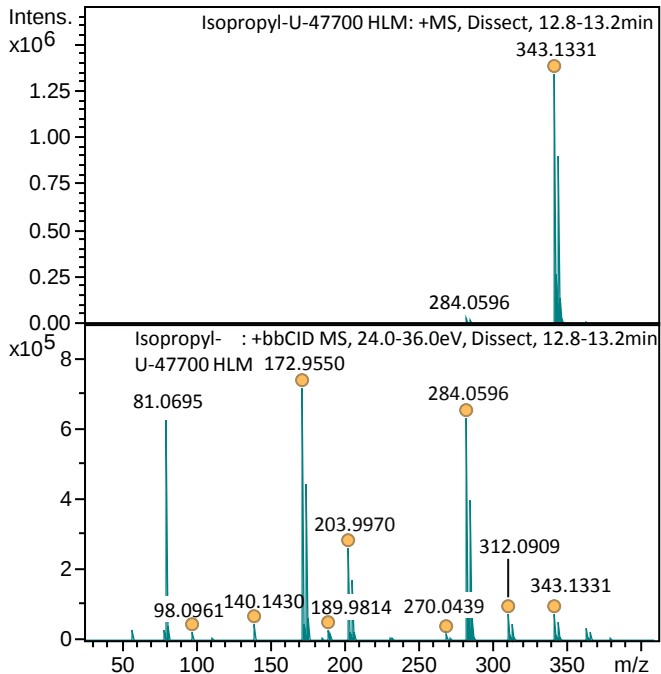


Isopropyl-U-47700

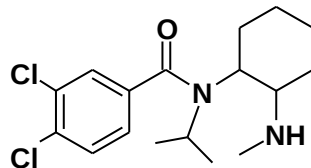


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
81.0696	C6H9	81.0699	3.7	1.1
126.1275	C8H16N	126.1277	1.6	10.5
172.9551	C7H3Cl2O	172.9555	2.7	8.3
189.9815	C7H6Cl2NO	189.9821	2.9	4.8
232.0284	C10H12Cl2NO	232.0290	2.6	13.3
270.0442	C13H14Cl2NO	270.0447	1.9	5.8
312.0911	C16H20Cl2NO	312.0916	1.9	7.5
357.1492	C18H27Cl2N2O	357.1495	0.8	113.3

1. (N)-dealkylation

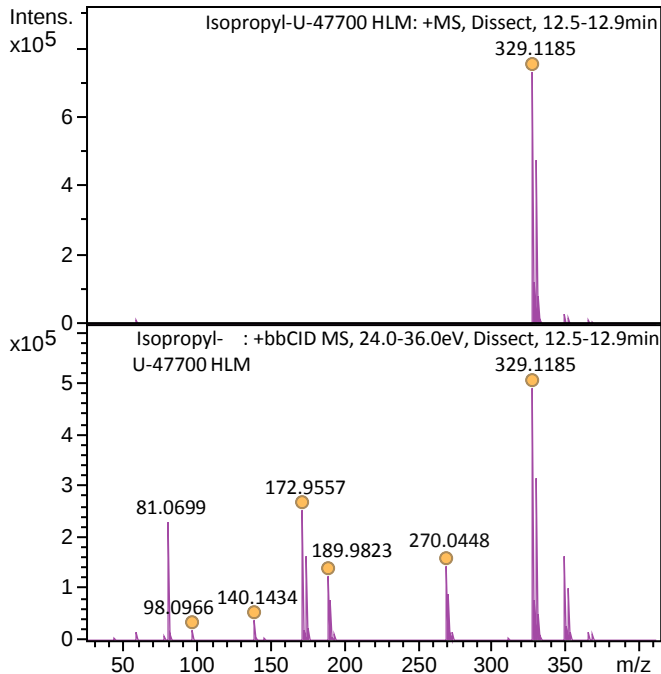


(N)-demethyl-Isopropyl-U-47700

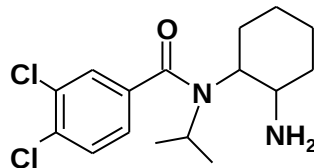


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
58.0285	C2H4NO	58.0287	3.4	n.a.
81.0695	C6H9	81.0699	4.1	1.1
98.0961	C6H12N	98.0964	3.6	n.a.
140.1430	C9H18N	140.1434	2.5	4.7
172.9550	C7H3Cl2O	172.9555	3.2	12.6
189.9814	C7H6Cl2NO	189.9821	3.6	23.9
203.9970	C8H8Cl2NO	203.9977	3.6	3.6
270.0439	C13H14Cl2NO	270.0447	2.9	42.8
284.0596	C14H16Cl2NO	284.0603	2.6	12.5
312.0909	C16H20Cl2NO	312.0916	2.3	8.3
343.1331	C17H25Cl2N2O	343.1338	2.2	8.9

2. N-dealkylation

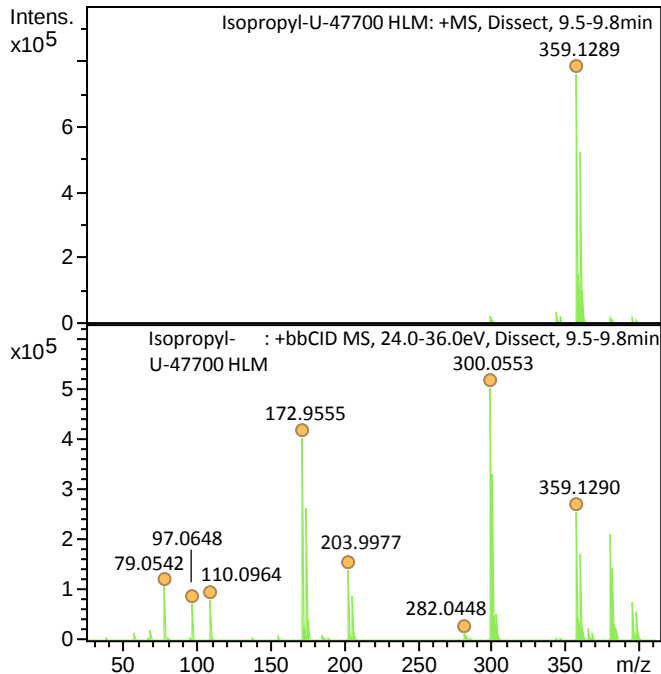


N,N-didemethyl-Isopropyl-U-47700

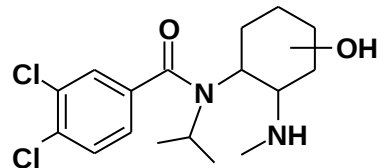


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
81.0699	C6H9	81.0699	-0.9	1.1
98.0966	C6H12N	98.0964	-1.3	2.8
140.1434	C9H18N	140.1434	-0.5	3.3
172.9557	C7H3Cl2O	172.9555	-0.9	4.9
189.9823	C7H6Cl2NO	189.9821	-0.8	10.5
270.0448	C13H14Cl2NO	270.0447	-0.3	4.4
329.1185	C16H23Cl2N2O	329.1182	-0.9	11.3

3. N-dealkylation + Hydroxylation

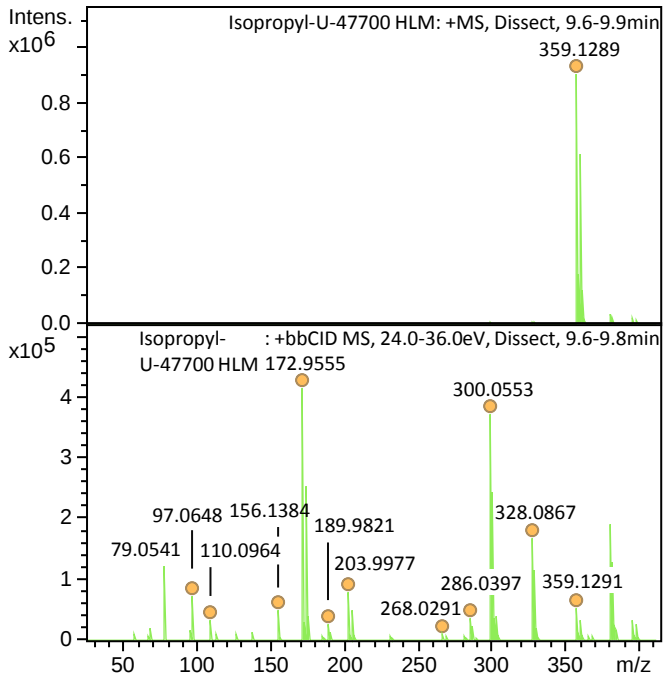


Hydroxy-N-demethyl-Isopropyl-U-47700

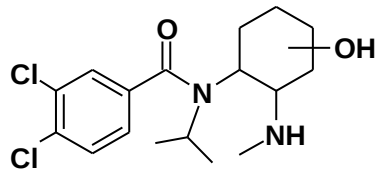


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
79.0542	C6H7	79.0542	0.9	38.4
97.0648	C6H9O	97.0648	-0.3	4.1
110.0964	C7H12N	110.0964	-0.1	2.7
172.9555	C7H3Cl2O	172.9555	0.1	4.5
203.9977	C8H8Cl2NO	203.9977	0.1	10.1
282.0448	C14H14Cl2NO	282.0447	-0.3	157.1
300.0553	C14H16Cl2NO2	300.0553	-0.1	3.2
359.1290	C17H25Cl2N2O2	359.1288	-0.6	6.2

4. N-dealkylation + Hydroxylation

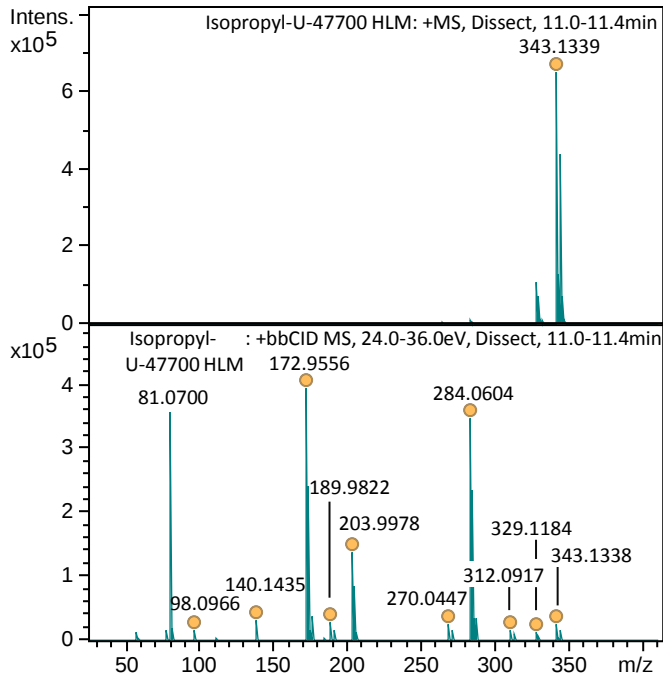


Hydroxy-N-demethyl-Isopropyl-U-47700

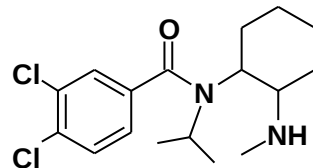


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
79.0541	C6H7	79.0542	1.2	38.1
97.0648	C6H9O	97.0648	-0.3	3.3
110.0964	C7H12N	110.0964	-0.1	19.9
156.1384	C9H18NO	156.1383	-0.6	6.1
172.9555	C7H3Cl2O	172.9555	0	13.1
189.9821	C7H6Cl2NO	189.9821	0.2	29.7
203.9977	C8H8Cl2NO	203.9977	0	16.1
268.0291	C13H12Cl2NO	268.0290	-0.3	16.1
286.0397	C13H14Cl2NO2	286.0396	-0.2	8.4
300.0553	C14H16Cl2NO2	300.0553	-0.1	3
328.0867	C16H20Cl2NO2	328.0866	-0.4	13.8
359.1291	C17H25Cl2N2O2	359.1288	-0.9	5.5

5. (N)-dealkylation

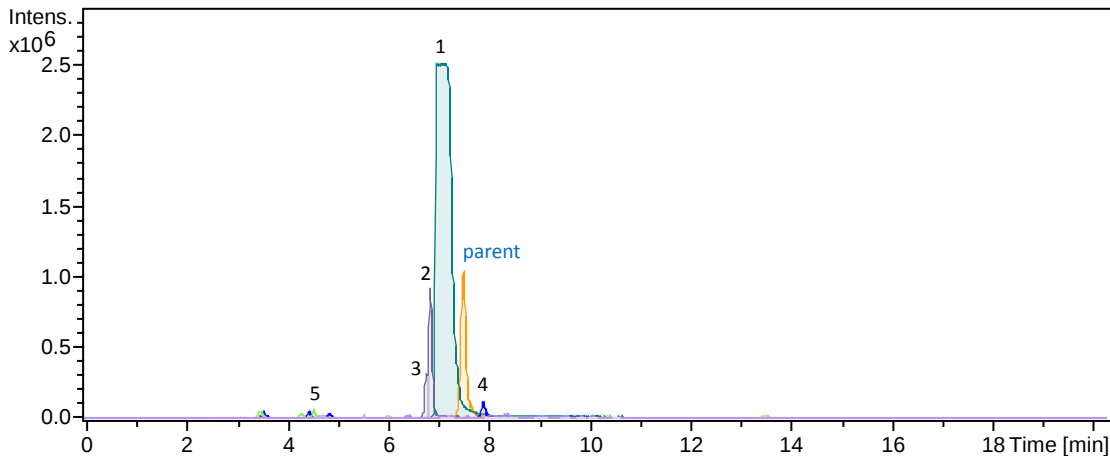
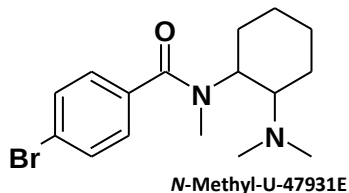


(N)-demethyl-Isopropyl-U-47700

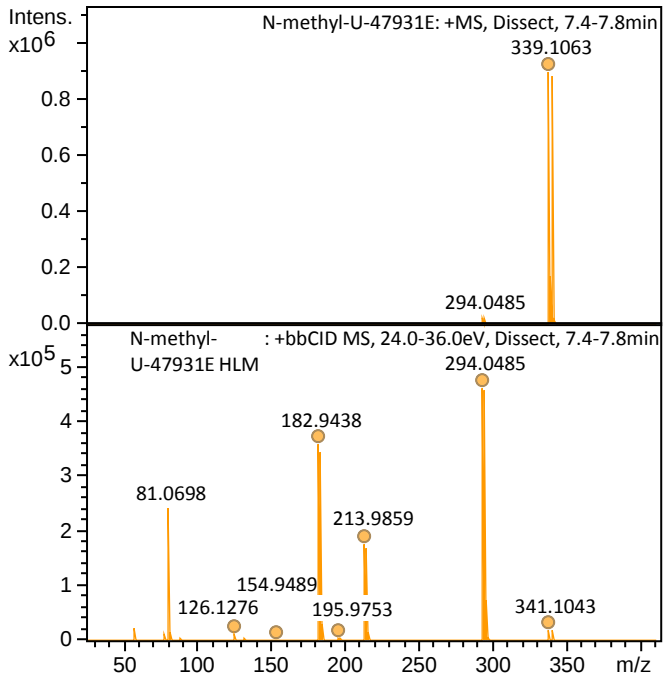


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
58.0289	C2H4NO	58.0287	-3.1	n.a.
81.0700	C6H9	81.0699	-1.3	4.2
98.0966	C6H12N	98.0964	-2.3	8.3
140.1435	C9H18N	140.1434	-1	10.1
172.9556	C7H3Cl2O	172.9555	-0.2	15.9
189.9822	C7H6Cl2NO	189.9821	-0.6	30.4
203.9978	C8H8Cl2NO	203.9977	-0.3	9.8
270.0447	C13H14Cl2NO	270.0447	0	16
284.0604	C14H16Cl2NO	284.0603	-0.3	10.2
312.0917	C16H20Cl2NO	312.0916	-0.3	13
329.1184	C16H23Cl2N2O	329.1182	-0.7	18.9
343.1338	C17H25Cl2N2O	343.1338	0	15.1

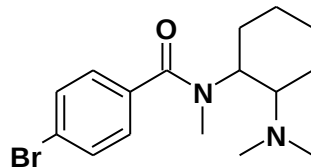
MS-Spectra of *in vitro* phase I metabolites produced in a pooled human liver microsomes (pHLM) assay with subsequent identification by LC-qToF-MS analysis



Parent compound

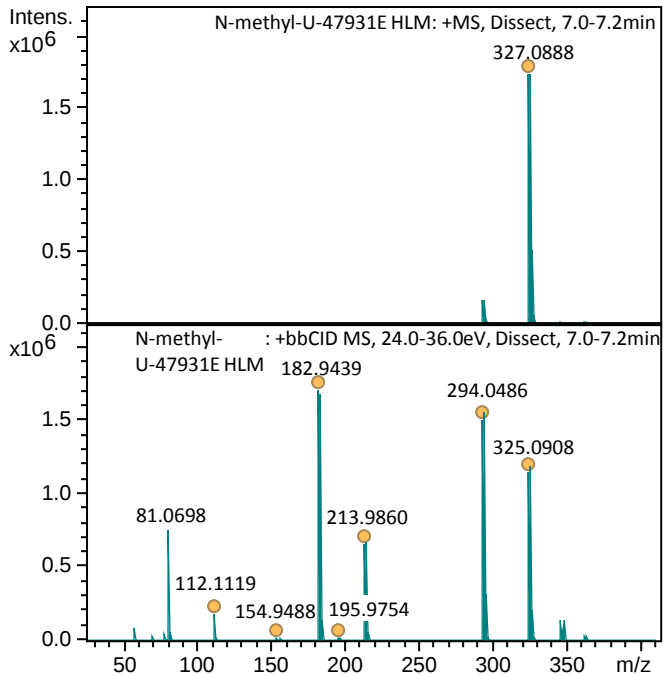


N-Methyl-U-47931E

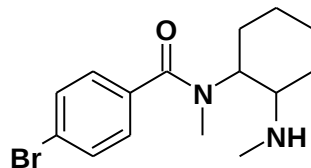


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
58.0288	C2H4NO	58.0287	-0.2	n.a.
81.0698	C6H9	81.0699	1.1	4.4
126.1276	C8H16N	126.1277	1.1	6.4
154.9489	C6H4Br	154.9491	1.4	45.6
182.9438	C7H4BrO	182.9440	1.1	11
195.9753	C8H7BrN	195.9756	1.9	64.7
213.9859	C8H9BrNO	213.9862	1.5	6.8
294.0485	C14H17BrNO	294.0488	1	6.4
339.1063	C16H24BrN2O	339.1067	1.2	13.6

1. N-dealkylation

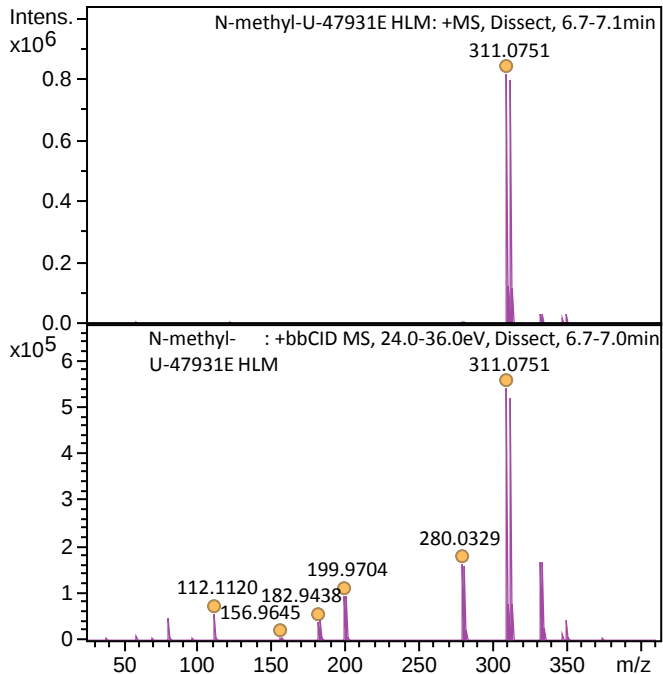


N-demethyl-N-Methyl-U-47931E

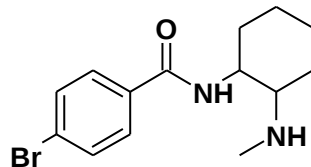


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
58.0288	C2H4NO	58.0287	-0.2	n.a.
81.0698	C6H9	81.0699	1.1	9.1
112.1119	C7H14N	112.1121	2	9.3
154.9488	C6H4Br	154.9491	2.1	49.9
182.9439	C7H4BrO	182.9440	0.5	8.8
195.9754	C8H7BrN	195.9756	1	63.6
213.9860	C8H9BrNO	213.9862	0.8	11.9
294.0486	C14H17BrNO	294.0488	0.6	33.6
325.0908	C15H22BrN2O	325.0910	0.6	17.2

2. N-dealkylation

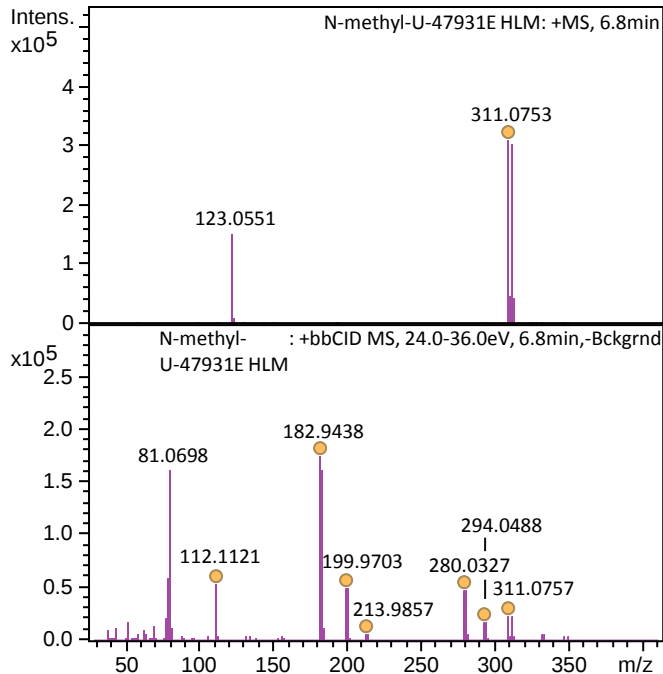


N,N-didemethyl-*N*-Methyl-U-47931E

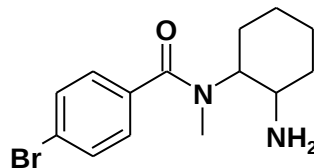


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
81.0698	C6H9	81.0699	1.2	33.5
112.1120	C7H14N	112.1121	1.1	1.9
156.9645	C6H6Br	156.9647	1.6	160.9
182.9438	C7H4BrO	182.9440	1	85.6
199.9704	C7H7BrNO	199.9706	1	6.5
280.0329	C13H15BrNO	280.0332	1.1	6.2
311.0751	C14H20BrN2O	311.0754	0.7	14.1

3. N-dealkylation

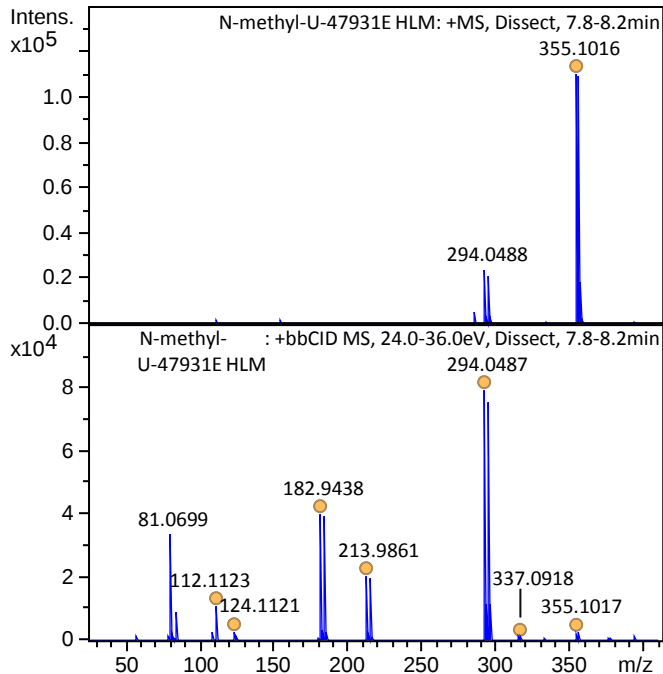


N,N-didemethyl-N-Methyl-U-47931E



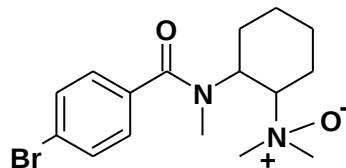
Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
81.0698	C6H9	81.0699	1	5.4
112.1121	C7H14N	112.1121	0.2	4.2
182.9438	C7H4BrO	182.9440	1.3	26.6
199.9703	C7H7BrNO	199.9706	1.4	6.5
213.9857	C8H9BrNO	213.9862	2.5	29.4
280.0327	C13H15BrNO	280.0332	1.7	8.6
294.0488	C14H17BrNO	294.0488	0	25.4
311.0757	C14H20BrN2O	311.0754	-1.1	21.8

4. Hydroxylation (*N*-oxide formation)



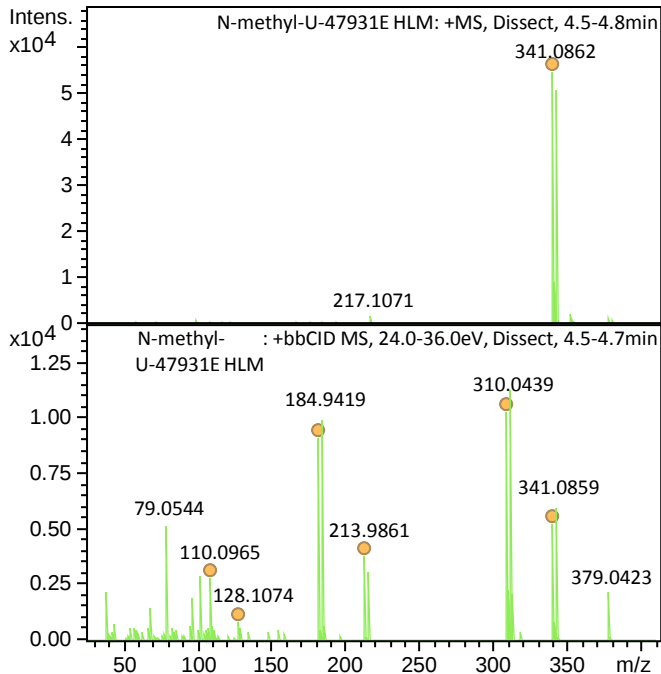
N-Methyl-U-47931E *N*-oxide

(or hydroxylated at dimethylamino-moiety)

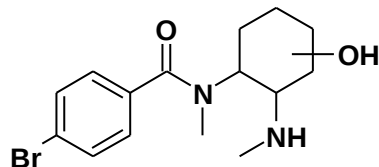


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
81.0699	C6H9	81.0699	-0.1	5.8
112.1123	C7H14N	112.1121	-1.6	n.a.
124.1121	C8H14N	124.1121	-0.1	354.8
182.9438	C7H4BrO	182.9440	0.9	6.2
213.9861	C8H9BrNO	213.9862	0.3	9.4
294.0487	C14H17BrNO	294.0488	0.2	15.6
337.0918	C16H22BrN2O	337.0910	-2.2	146.5
355.1017	C16H24BrN2O2	355.1016	-0.5	86

5. *N*-dealkylation + Hydroxylation

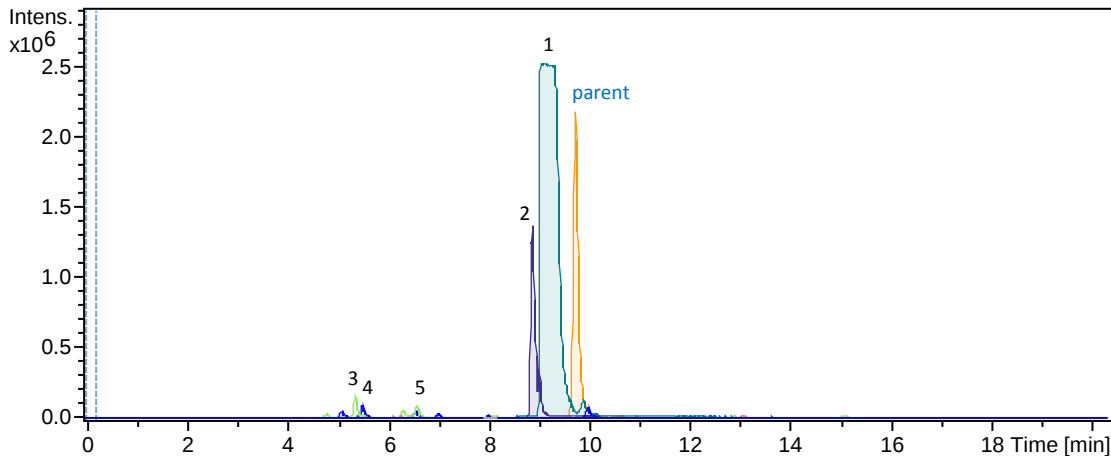
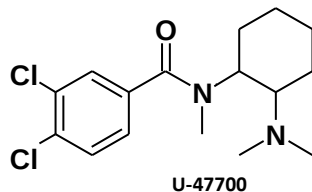


Hydroxy-*N*-demethyl-*N*-Methyl-U-47931E

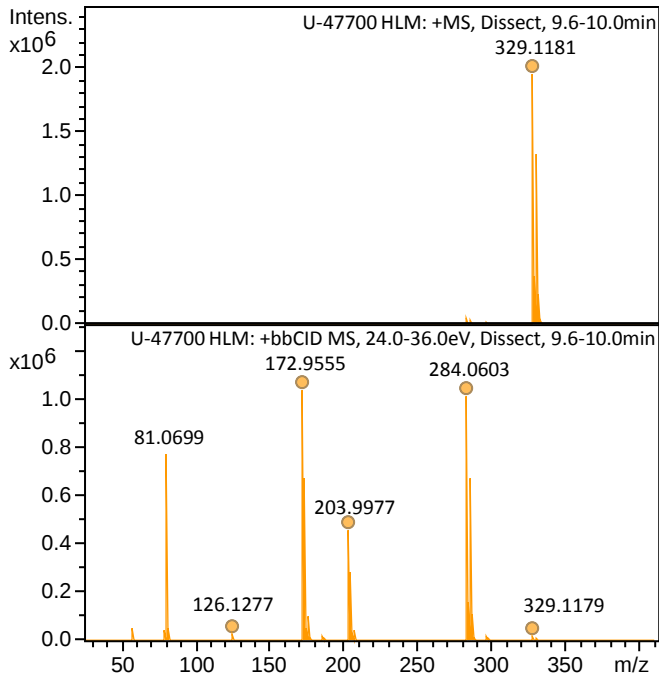


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
79.0544	C6H7	79.0542	-1.6	15.9
110.0965	C7H12N	110.0964	-0.8	32.2
128.1074	C7H14NO	128.1070	-3.3	365.3
182.9441	C7H4BrO	182.9440	-0.6	44.5
213.9861	C8H9BrNO	213.9862	0.3	99.4
310.0439	C14H17BrNO2	310.0437	-0.6	44.9
341.0859	C15H22BrN2O2	341.0859	-0.1	53.3

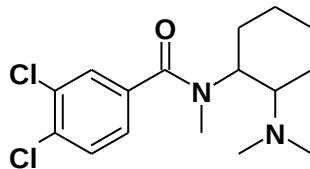
MS-Spectra of *in vitro* phase I metabolites produced in a pooled human liver microsomes (pHLM) assay with subsequent identification by LC-qToF-MS analysis



Parent compound

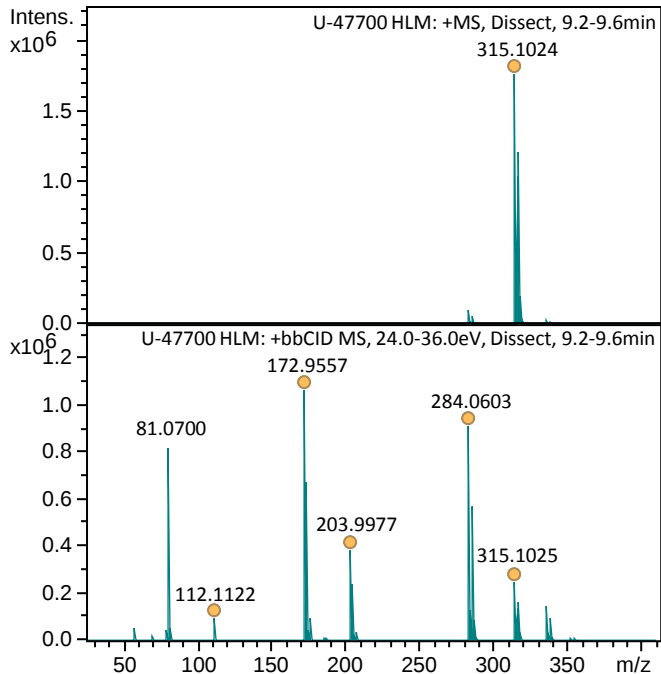


U-47700

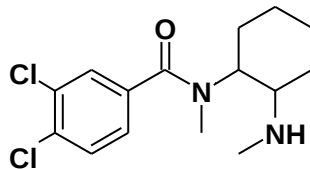


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
58.0288	C2H4NO	58.0287	-1.6	n.a.
81.0699	C6H9	81.0699	-0.2	3.5
126.1277	C8H16N	126.1277	0.2	5.6
172.9555	C7H3Cl2O	172.9555	0.1	4.7
203.9977	C8H8Cl2NO	203.9977	0.4	10.6
284.0603	C14H16Cl2NO	284.0603	0.3	5.4
329.1179	C16H23Cl2N2O	329.1182	0.9	50.1

1. N-dealkylation

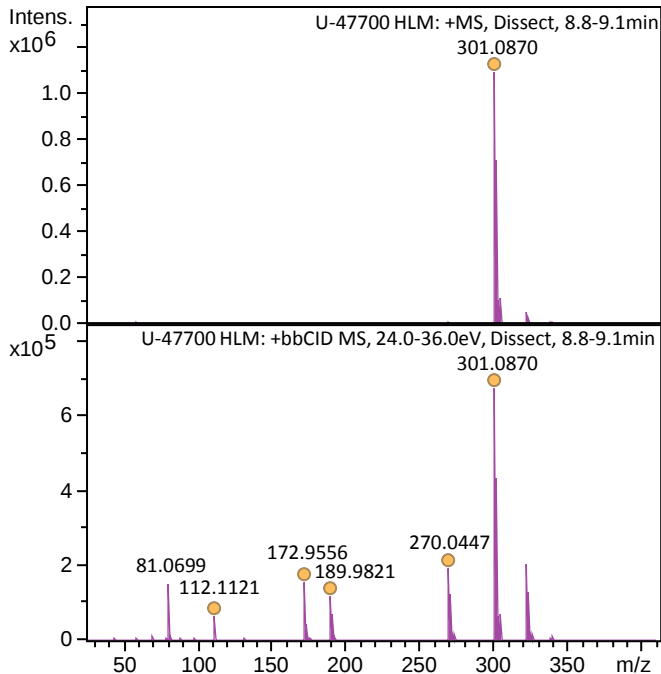


N-demethyl-U-47700

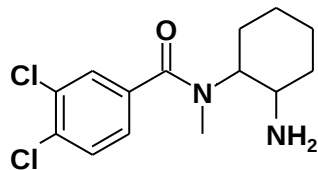


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
58.0289	C2H4NO	58.0287	-3.4	n.a.
81.0700	C6H9	81.0699	-1.2	1.2
112.1122	C7H14N	112.1121	-0.7	8
172.9557	C7H3Cl2O	172.9555	-0.7	6.7
203.9977	C8H8Cl2NO	203.9977	0	13.4
284.0603	C14H16Cl2NO	284.0603	0.2	13.7
315.1025	C15H21Cl2N2O	315.1025	0.2	8.2

2. N-dealkylation

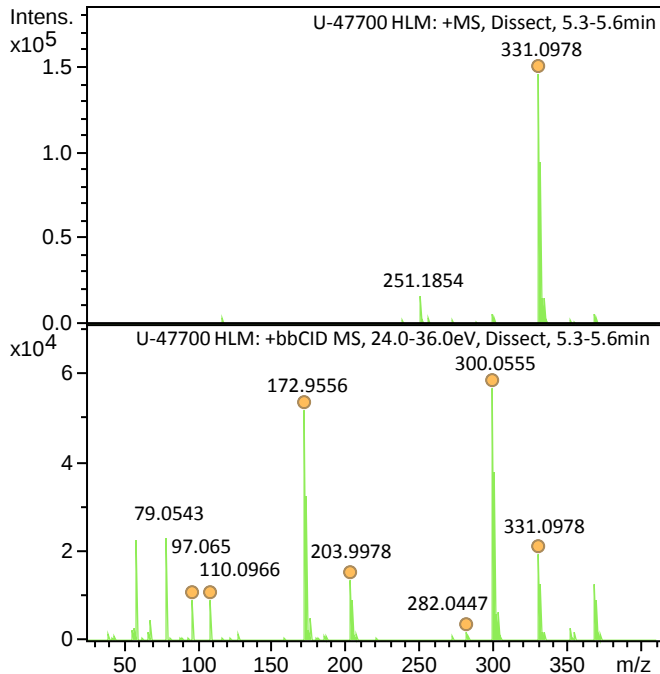


N,N-didemethyl-U-47700

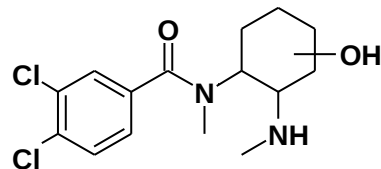


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
81.0699	C6H9	81.0699	-0.2	10.8
112.1121	C7H14N	112.1121	-0.2	5.2
172.9556	C7H3Cl2O	172.9555	-0.2	153.2
189.9821	C7H6Cl2NO	189.9821	0	12
270.0447	C13H14Cl2NO	270.0447	0	7.8
301.0870	C14H19Cl2N2O	301.0869	-0.3	5.5

3. N-dealkylation + hydroxylation

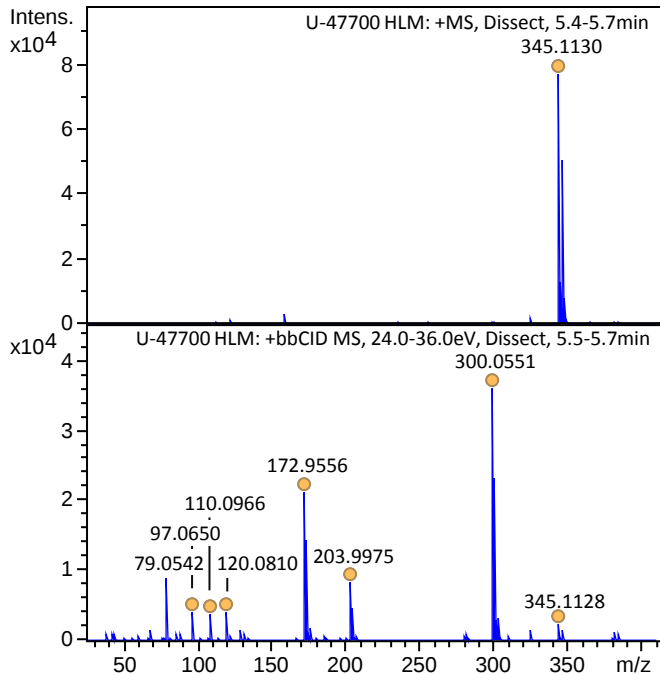


Hydroxy-N-demethyl-U-47700

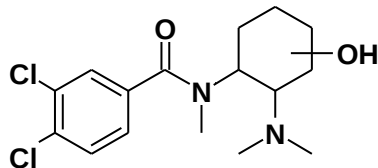


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
79.0543	C6H7	79.0542	-1.5	35.7
97.0650	C6H9O	97.0648	-2.2	n.a.
110.0966	C7H12N	110.0964	-1.8	31
172.9556	C7H3Cl2O	172.9555	-0.5	7.8
203.9978	C8H8Cl2NO	203.9977	-0.2	18.3
282.0447	C14H14Cl2NO	282.0447	0	63.2
300.0555	C14H16Cl2NO2	300.0553	-0.9	8.6
331.0978	C15H21Cl2N2O2	331.0975	-1	7.1

4. Hydroxylation

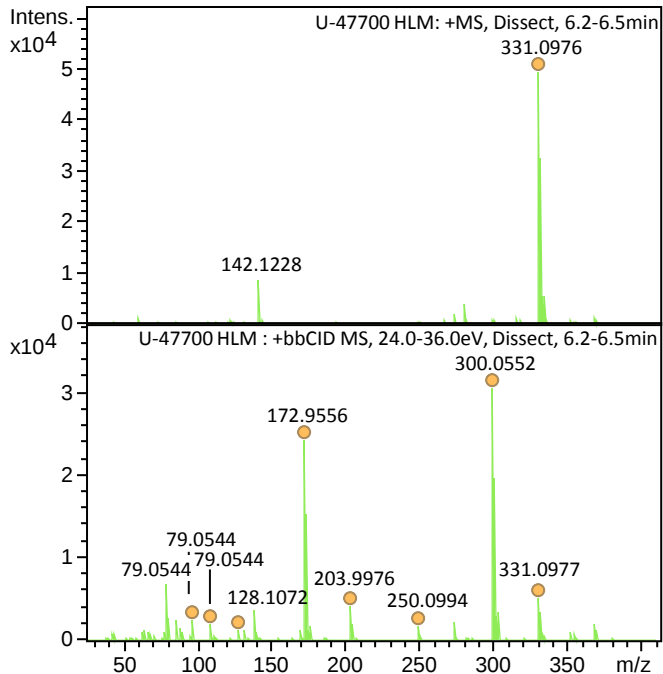


Hydroxy-U-47700

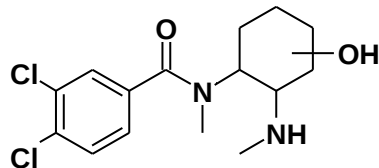


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
79.0542	C6H7	79.0542	0.1	19.4
97.0650	C6H9O	97.0648	-2.1	n.a.
110.0966	C7H12N	110.0964	-1.8	n.a.
120.081	C8H10N	120.0808	-2.1	n.a.
172.9556	C7H3Cl2O	172.9555	-0.1	20.3
203.9975	C8H8Cl2NO	203.9977	1.2	38.8
300.0551	C14H16Cl2NO2	300.0553	0.4	11.8
345.1128	C16H23Cl2N2O2	345.1131	1	48.6

5. *N*-dealkylation + hydroxylation

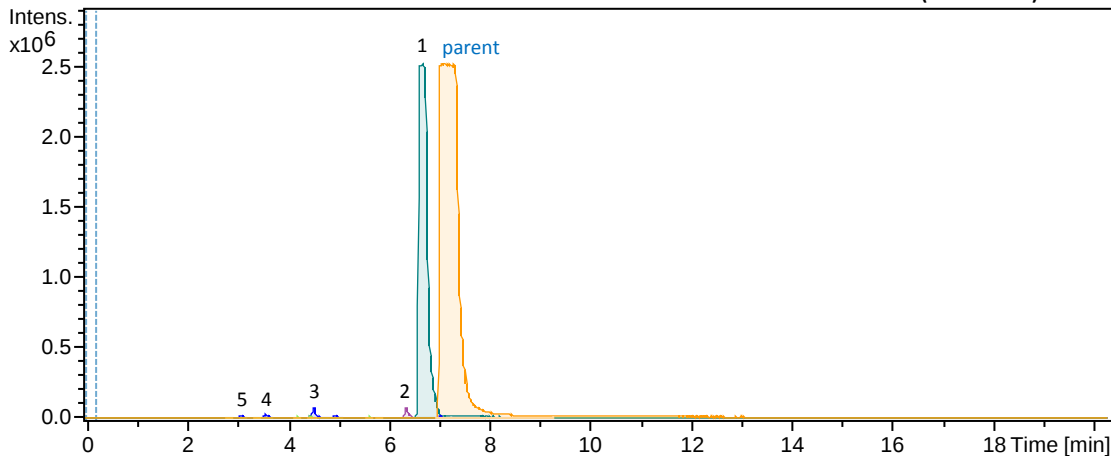
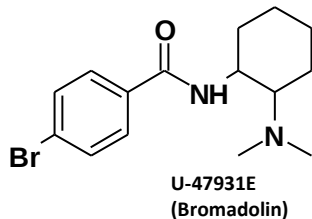


Hydroxy-*N*-demethyl-U-47700

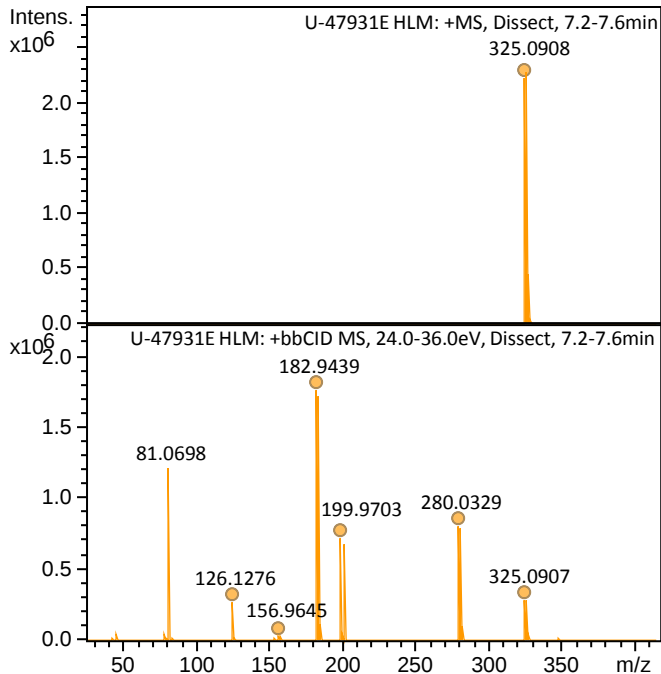


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
79.0544	C6H7	79.0542	-1.6	132.6
97.0650	C6H9O	97.0648	-1.6	n.a.
110.0966	C7H12N	110.0964	-1.8	62.3
128.1072	C7H14NO	128.1070	-1.5	n.a.
138.9947	C7H4ClO	138.9945	-1.1	40.5
172.9556	C7H3Cl2O	172.9555	-0.1	13.6
203.9976	C8H8Cl2NO	203.9977	0.6	71.2
250.0994	C14H17ClNO	250.0993	-0.3	39.7
300.0552	C14H16Cl2NO2	300.0553	0.2	7.9
331.0977	C15H21Cl2N2O2	331.0975	-0.7	22.1

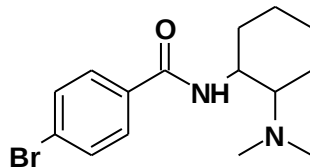
MS-Spectra of *in vitro* phase I metabolites produced in a pooled human liver microsomes (pHLM) assay with subsequent identification by LC-qToF-MS analysis



Parent compound

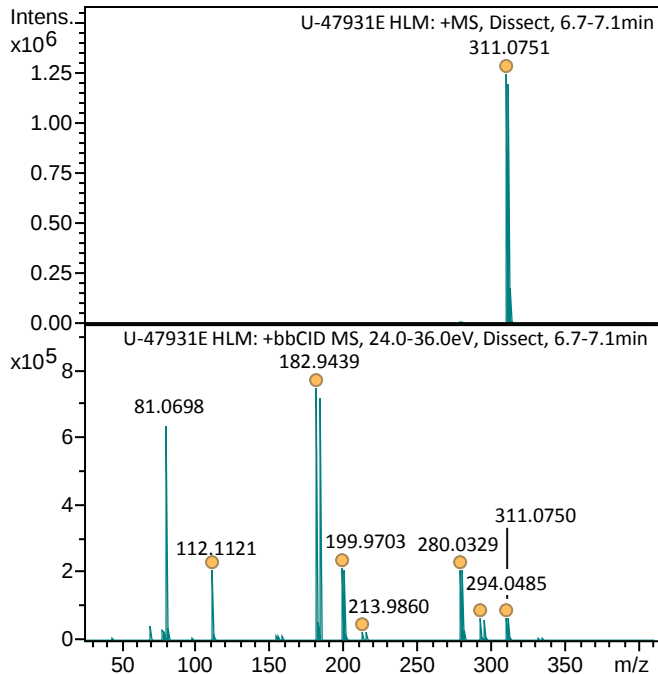


U-47931E

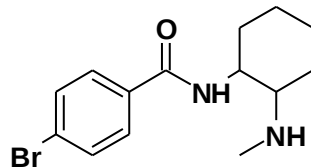


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
81.0698	C6H9	81.0699	0.7	1.5
126.1276	C8H16N	126.1277	1.3	2.5
156.9645	C6H6Br	156.9647	1.6	51.3
182.9439	C7H4BrO	182.9440	0.7	1.6
199.9703	C7H7BrNO	199.9706	1.1	20.1
280.0329	C13H15BrNO	280.0332	1.1	9
325.0907	C15H22BrN2O	325.0910	1.1	13.8

1. N-dealkylation

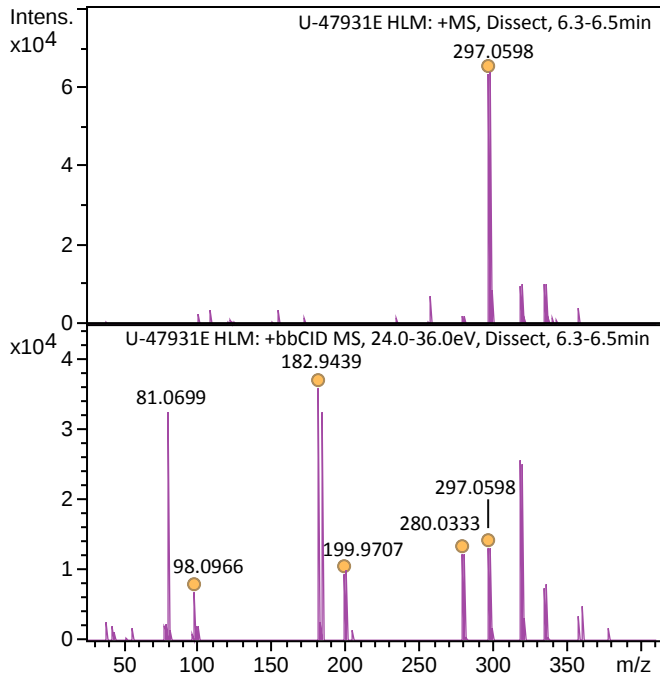


N-demethyl-U-47931E

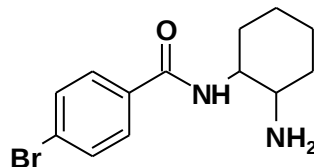


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
81.0698	C6H9	81.0699	0.6	2
112.1121	C7H14N	112.1121	0.2	7.1
182.9439	C7H4BrO	182.9440	0.6	7.8
199.9703	C7H7BrNO	199.9706	1.2	9
213.986	C8H9BrNO	213.9862	1.2	27.9
280.0329	C13H15BrNO	280.0332	1.1	5.1
294.0485	C14H17BrNO	294.0488	1	15.6
311.0750	C14H20BrN2O	311.0754	1.1	7.8

2. N-dealkylation

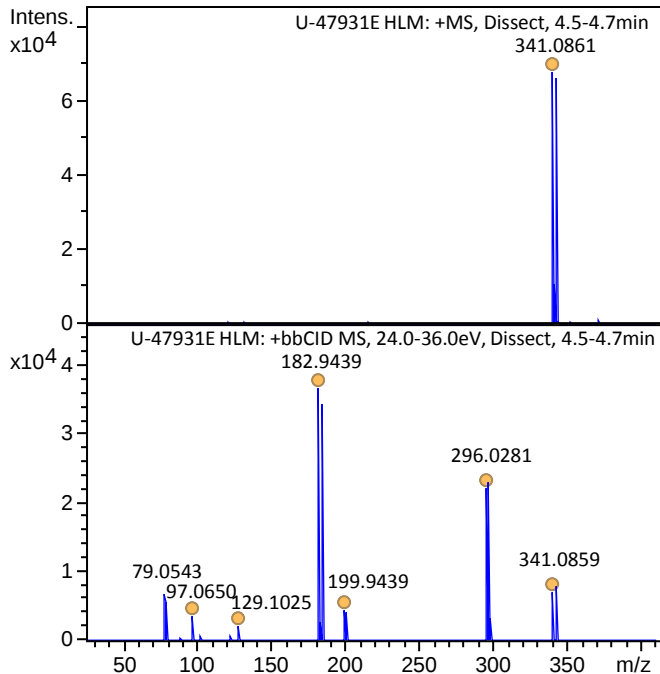


N,N-didemethyl-U-47931E

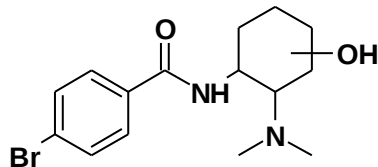


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
81.0699	C6H9	81.0699	-0.9	10.3
98.0966	C6H12N	98.0964	-1.6	169.1
182.9439	C7H4BrO	182.9440	0.5	34.2
199.9707	C7H7BrNO	199.9706	-0.8	50.7
280.0333	C13H15BrNO	280.0332	-0.5	51.6
297.0598	C13H18BrN2O	297.0597	-0.5	13.1

3. Hydroxylation

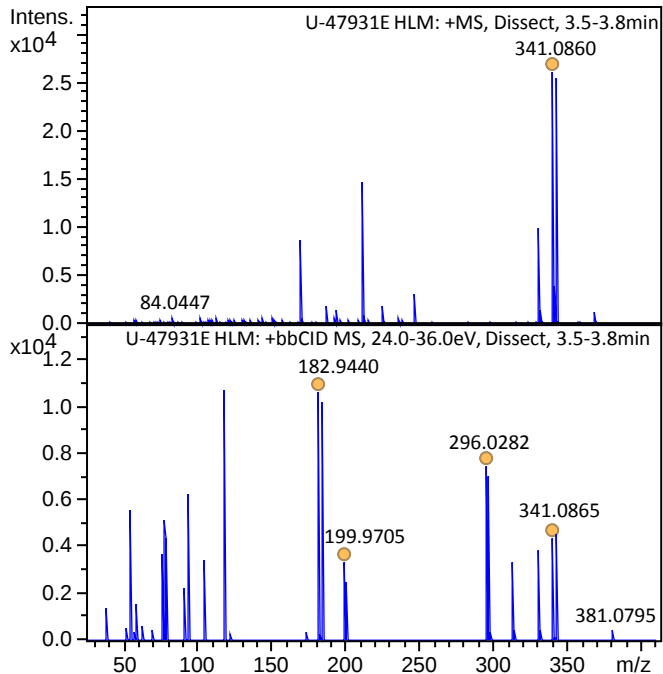


Hydroxy-U-47931E

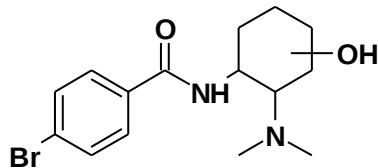


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
79.0543	C6H7	79.0542	-0.8	43.5
97.0650	C6H9O	97.0648	-1.8	n.a.
129.1025	C6H13N2O	129.1022	-1.7	n.a.
182.9439	C7H4BrO	182.9440	0.8	19.7
199.9706	C7H7BrNO	199.9706	-0.4	58.6
296.0281	C13H15BrNO2	296.0281	0	24.5
341.0859	C15H22BrN2O2	341.0859	0	102.7

4. Hydroxylation

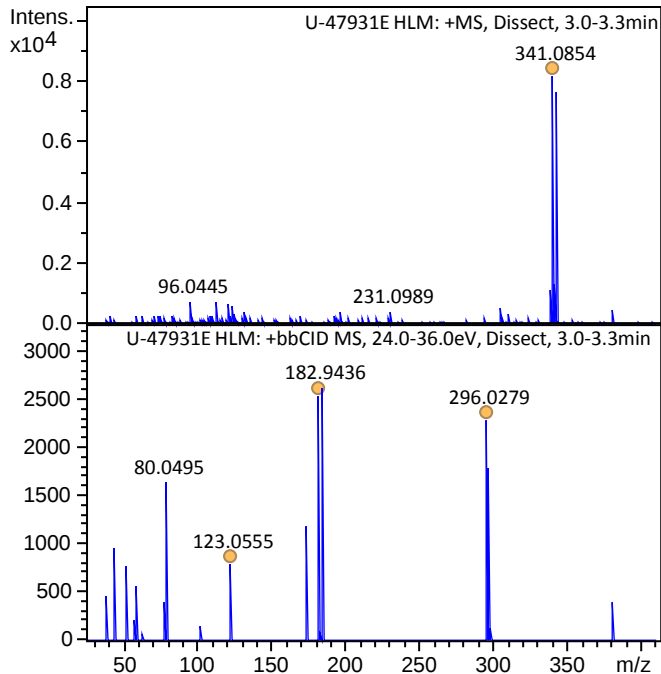


Hydroxy-U-47931E

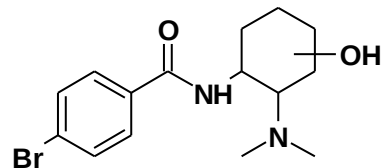


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
182.9440	C7H4BrO	182.9440	-0.2	39.3
199.9705	C7H7BrNO	199.9706	0.5	126.9
296.0282	C13H15BrNO2	296.0281	-0.4	75.4
341.0865	C15H22BrN2O2	341.0859	-1.6	93.5

5. Hydroxylation

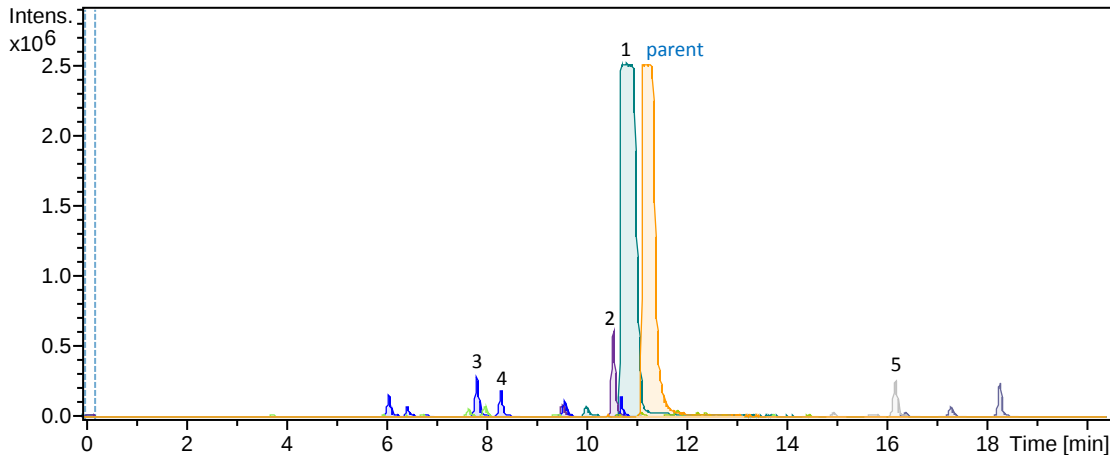
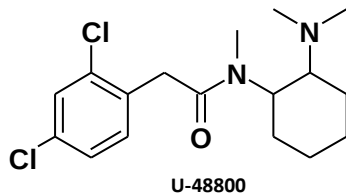


Hydroxy-U-47931E

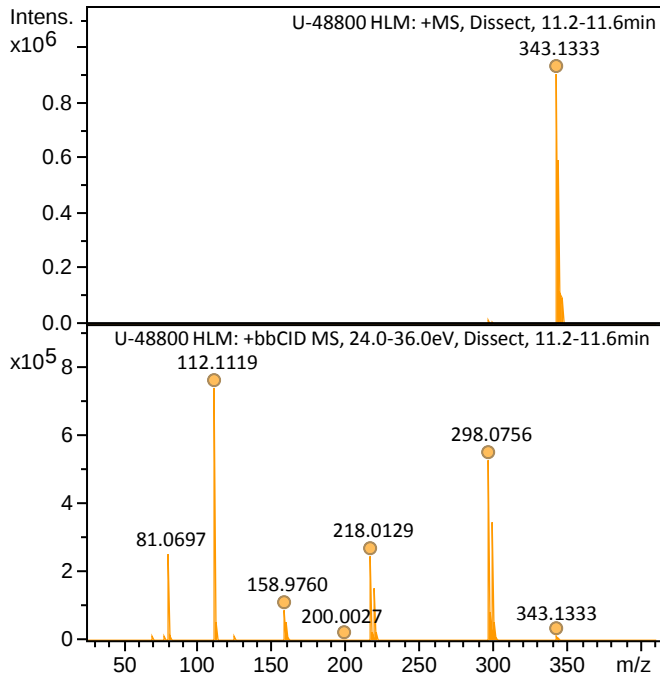


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
80.0495	C5H6N	80.0495	0.2	n.a.
123.0555	C6H7N2O	123.0553	-1.3	n.a.
182.9436	C7H4BrO	182.9440	2.3	56.9
296.0279	C13H15BrNO2	296.0281	0.7	130.3

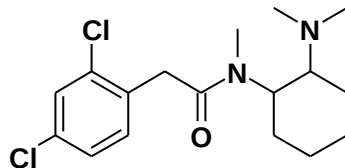
MS-Spectra of *in vitro* phase I metabolites produced in a pooled human liver microsomes (pHLM) assay with subsequent identification by LC-qToF-MS analysis



Parent compound

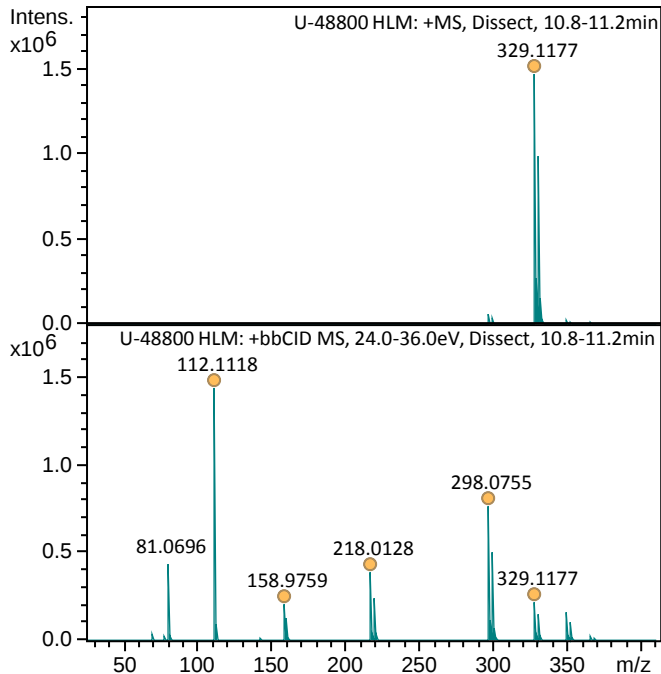


U-48800

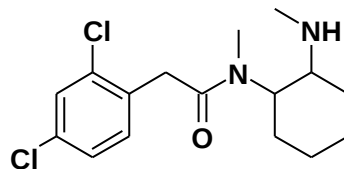


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
81.0697	C6H9	81.0699	2.7	1.1
112.1119	C7H14N	112.1121	2	2.8
158.9760	C7H5Cl2	158.9763	1.9	15.7
200.0027	C9H8Cl2N	200.0028	0.8	76.5
218.0129	C9H10Cl2NO	218.0134	2.2	7.1
298.0756	C15H18Cl2NO	298.0760	1.4	4.9
343.1333	C17H25Cl2N2O	343.1338	1.6	10.9

1. N-dealkylation

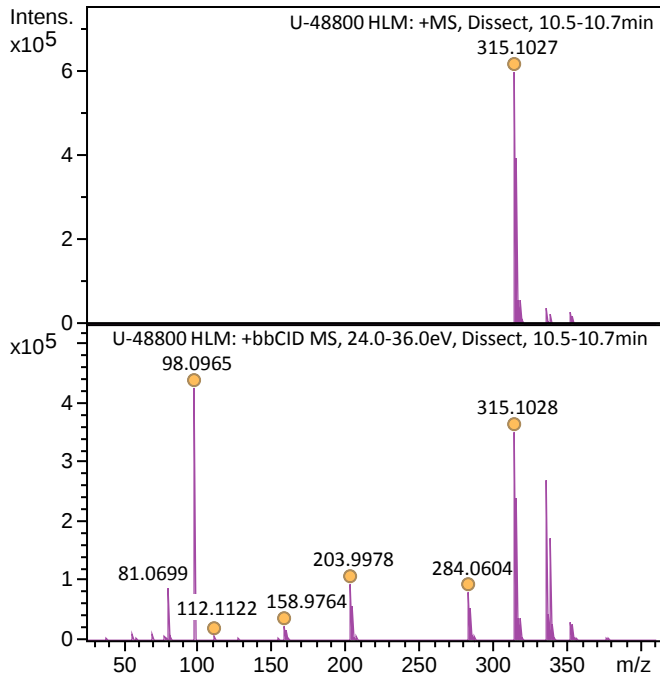


N-demethyl-U-48800

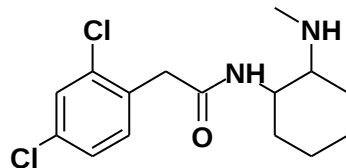


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
81.0696	C6H9	81.0699	2.9	1.8
112.1118	C7H14N	112.1121	2.5	5.8
158.9759	C7H5Cl2	158.9763	2.4	15.3
218.0128	C9H10Cl2NO	218.0134	2.6	10.5
298.0755	C15H18Cl2NO	298.0760	1.5	8.9
329.1177	C16H23Cl2N2O	329.1182	1.5	5.1

2. N-dealkylation

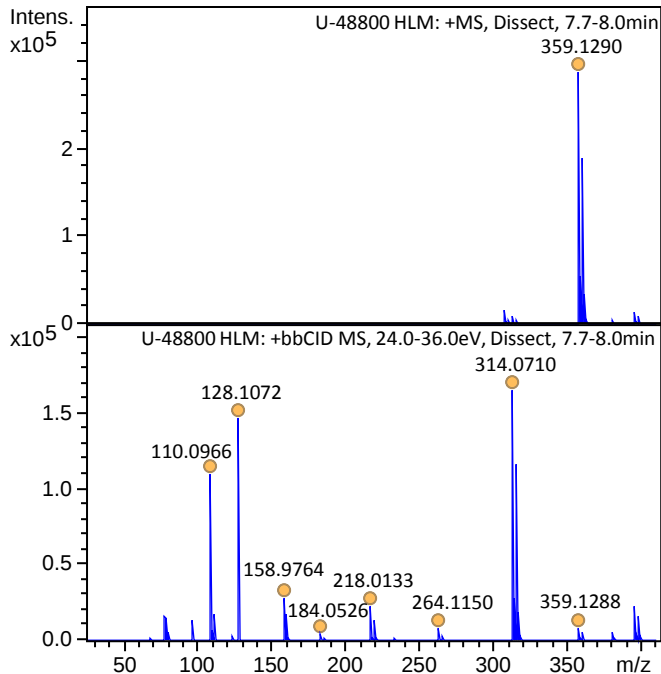


N,N-didemethyl-U-48800

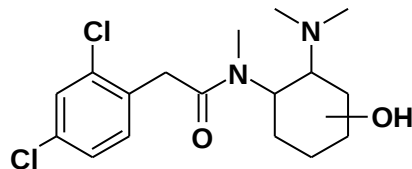


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
81.0699	C6H9	81.0699	-0.6	23.6
98.0965	C6H12N	98.0964	-1	2.7
112.1122	C7H14N	112.1121	-1.5	160.9
158.9764	C7H5Cl2	158.9763	-0.6	85
203.9978	C8H8Cl2NO	203.9977	0	16
284.0604	C14H16Cl2NO	284.0603	-0.1	10.9
315.1028	C15H21Cl2N2O	315.1025	-0.7	12.2

3. Hydroxylation

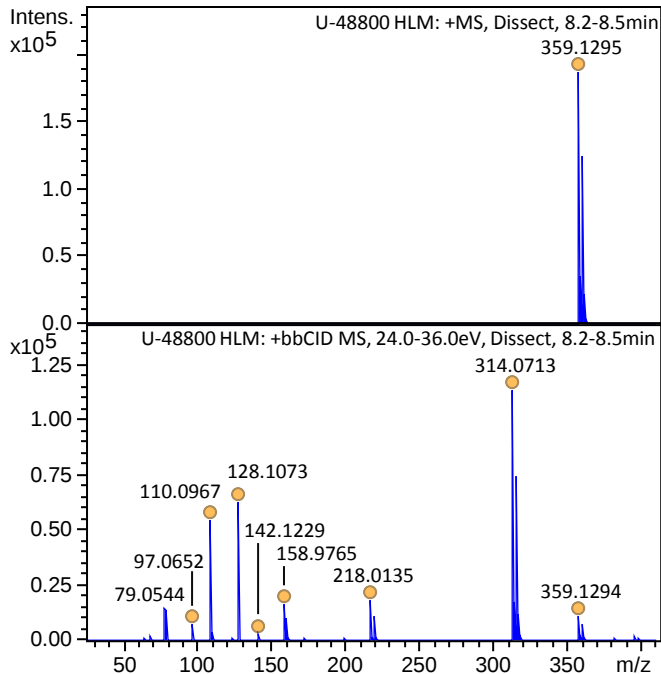


Hydroxy-U-48800

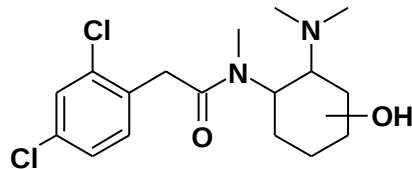


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
110.0966	C7H12N	110.0964	-1.9	90.6
128.1072	C7H14NO	128.1070	-1.6	3.2
158.9764	C7H5Cl2	158.9763	-0.8	17.1
184.0526	C9H11ClNO	184.0524	-1.4	19.6
218.0133	C9H10Cl2NO	218.0134	0.3	15.5
264.1150	C15H19ClNO	264.1150	-0.1	15.9
314.0710	C15H18Cl2NO2	314.0709	-0.4	17.7
359.1288	C17H25Cl2N2O2	359.1288	-0.1	16.5

4. Hydroxylation

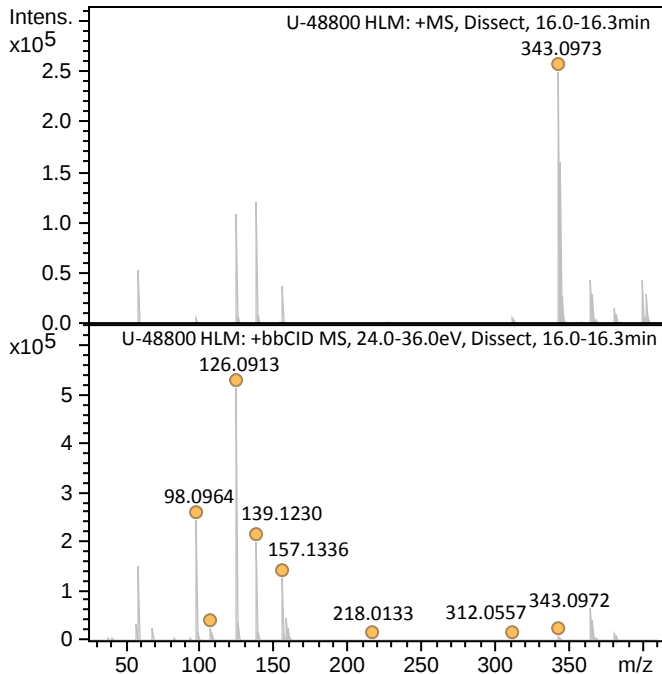


Hydroxy-U-48800

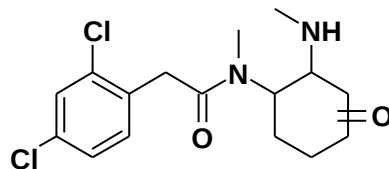


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
79.0544	C6H7	79.0542	-2.2	2.8
97.0652	C6H9O	97.0648	-3.9	n.a.
110.0967	C7H12N	110.0964	-2.7	8.3
128.1073	C7H14NO	128.1070	-2.7	7.7
142.1229	C8H16NO	142.1226	-2.1	n.a.
158.9765	C7H5Cl2	158.9763	-1.2	22.3
218.0135	C9H10Cl2NO	218.0134	-0.6	17.4
314.0713	C15H18Cl2NO2	314.0709	-1.2	5.3
359.1294	C17H25Cl2N2O2	359.1288	-1.7	18.7

5. N-dealkylation + Oxidation

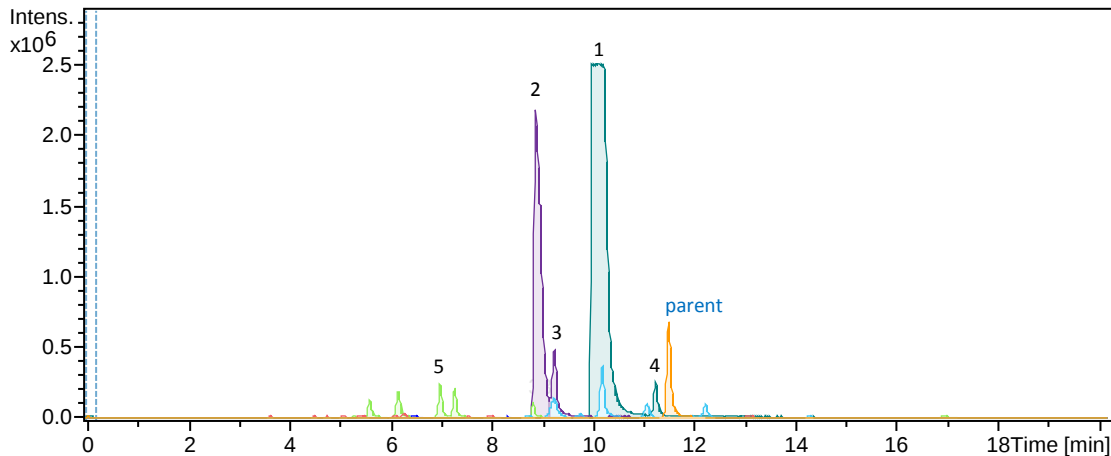
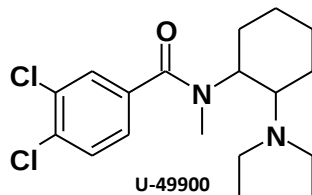


N-demethyl-U-48800 ketone

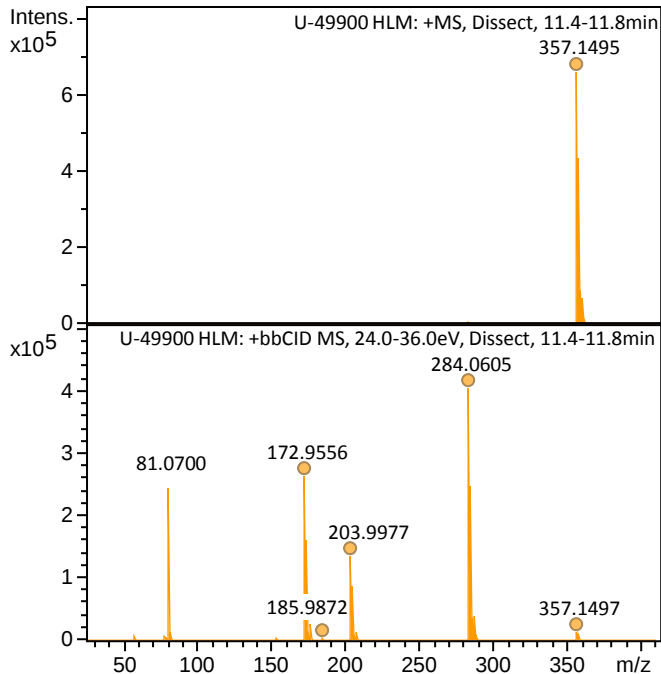


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
69.07	C5H9	69.0699	-1.4	2.9
98.0964	C6H12N	98.0964	0.8	1.4
108.0807	C7H10N	108.0808	0.4	289.3
126.0913	C7H12NO	126.0913	0	3.3
139.1230	C8H15N2	139.1230	0.1	8
157.1336	C8H17N2O	157.1335	-0.3	1.6
218.0132	C9H10Cl2NO	218.0134	0.9	68.4
312.0557	C15H16Cl2NO2	312.0553	-1.6	95.8
343.0972	C16H21Cl2N2O2	343.0975	0.8	24

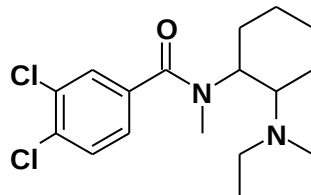
MS-Spectra of *in vitro* phase I metabolites produced in a pooled human liver microsomes (pHLM) assay with subsequent identification by LC-qToF-MS analysis



Parent compound

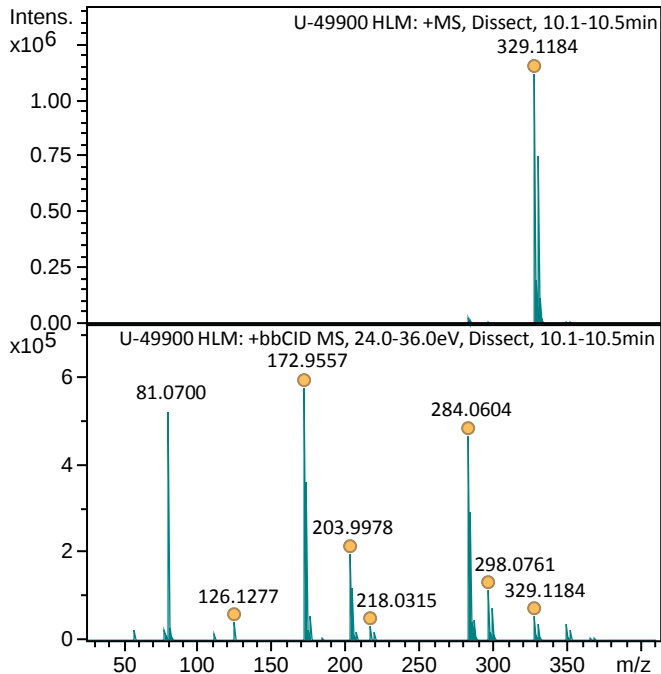


U-49900

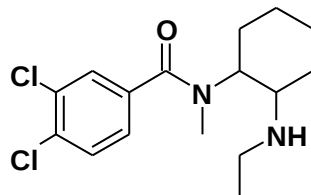


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
58.0290	C ₂ H ₄ NO	58.0287	-4.4	n.a.
81.0700	C ₆ H ₉	81.0699	-1.8	1.7
172.9556	C ₇ H ₃ Cl ₂ O	172.9555	-0.4	13
185.9872	C ₈ H ₆ Cl ₂ N	185.9872	-0.1	62.9
203.9977	C ₈ H ₈ Cl ₂ NO	203.9977	0	4.5
284.0605	C ₁₄ H ₁₆ Cl ₂ NO	284.0603	-0.6	18.6
357.1497	C ₁₈ H ₂₇ Cl ₂ N ₂ O	357.1495	-0.6	20.6

1. N-dealkylation

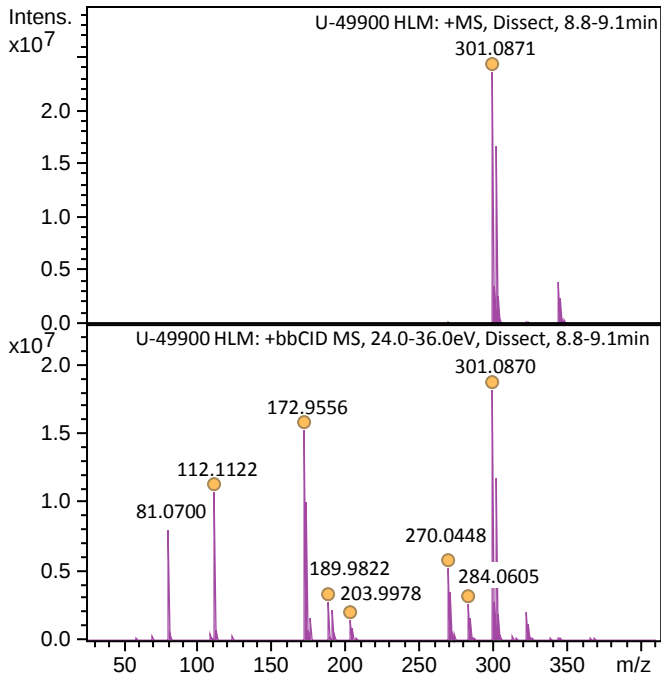


N-desethyl-U-49900

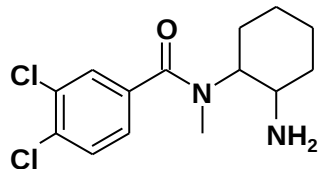


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
58.0289	C2H4NO	58.0287	-2.1	n.a.
81.0700	C6H9	81.0699	-1.2	4.1
126.1277	C8H16N	126.1277	0	2.8
172.9557	C7H3Cl2O	172.9555	-1	8.7
203.9978	C8H8Cl2NO	203.9977	-0.5	11.6
218.0135	C9H10Cl2NO	218.0134	-0.3	11.8
284.0604	C14H16Cl2NO	284.0603	-0.1	14.7
298.0761	C15H18Cl2NO	298.0760	-0.5	5.6
329.1184	C16H23Cl2N2O	329.1182	-0.5	8.3

2. N-dealkylation

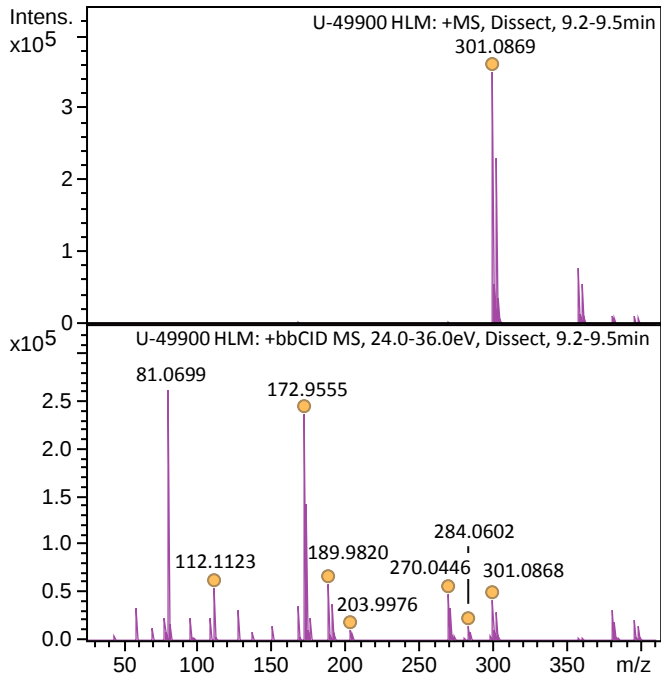


N,N-didesethyl-U-49900

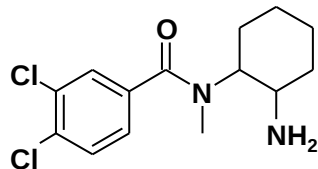


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
81.0700	C6H9	81.0699	-1	2.3
112.1122	C7H14N	112.1121	-0.9	5.1
172.9556	C7H3Cl2O	172.9555	-0.6	6.4
189.9822	C7H6Cl2NO	189.9821	-0.4	69.9
203.9978	C8H8Cl2NO	203.9977	-0.2	4.6
270.0448	C13H14Cl2NO	270.0447	-0.4	5.6
284.0605	C14H16Cl2NO	284.0603	-0.5	12.2
301.0870	C14H19Cl2N2O	301.0869	-0.5	5.4

3. N-dealkylation

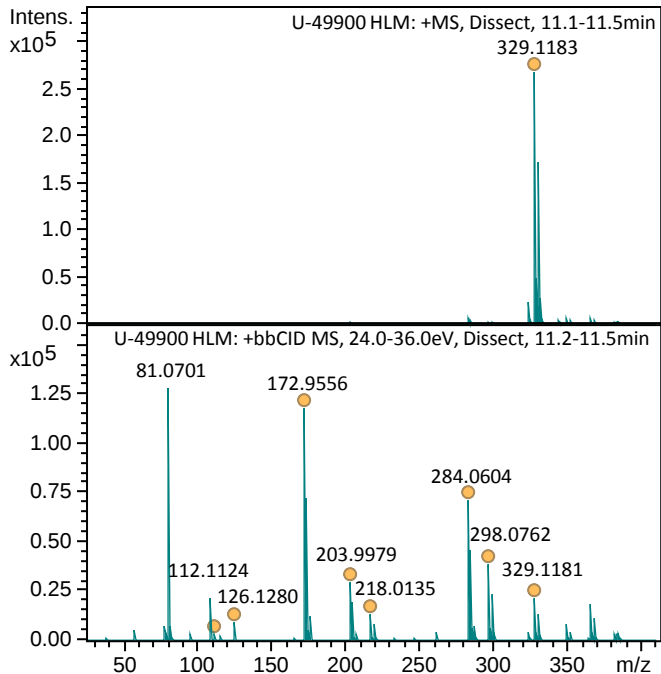


N,N-didesethyl-U-49900

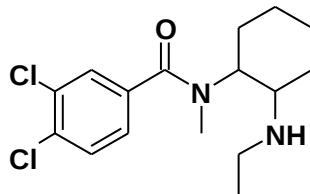


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
81.0699	C6H9	81.0699	-0.5	1.5
112.1123	C7H14N	112.1121	-1.7	10.9
172.9555	C7H3Cl2O	172.9555	0.5	17.7
189.9820	C7H6Cl2NO	189.9821	0.6	11
203.9976	C8H8Cl2NO	203.9977	0.8	54
270.0446	C13H14Cl2NO	270.0447	0.2	19.9
284.0602	C14H16Cl2NO	284.0603	0.6	12.2
301.0868	C14H19Cl2N2O	301.0869	0.4	23.8

4. N-dealkylation

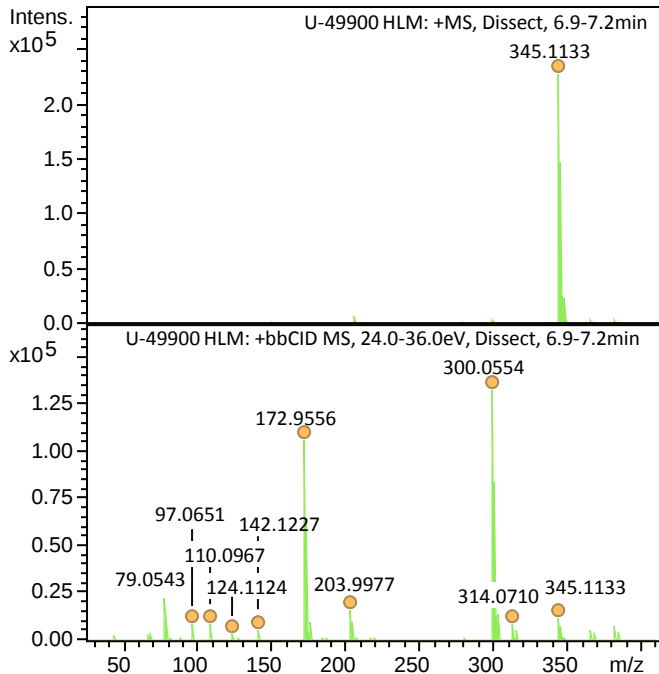


N-desethyl-U-49900

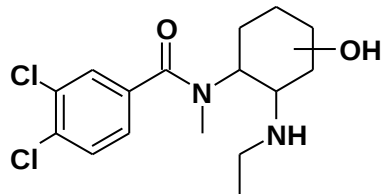


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
58.0291	C2H4NO	58.0287	-5.7	n.a.
81.0701	C6H9	81.0699	-2.2	1.9
112.1124	C7H14N	112.1121	-2.8	n.a.
126.1280	C8H16N	126.1277	-2.3	n.a.
172.9556	C7H3Cl2O	172.9555	-0.3	11.7
203.9979	C8H8Cl2NO	203.9977	-0.7	9.7
218.0135	C9H10Cl2NO	218.0134	-0.6	23.7
284.0604	C14H16Cl2NO	284.0603	-0.4	4.9
298.0762	C15H18Cl2NO	298.0760	-0.5	18.6
329.1181	C16H23Cl2N2O	329.1182	0.2	15.6

5. *N*-dealkylation + hydroxylation

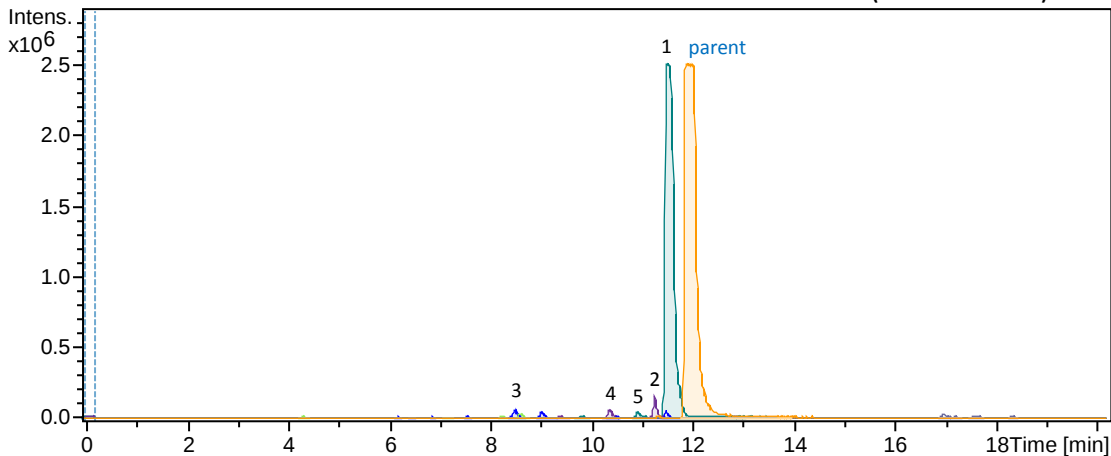
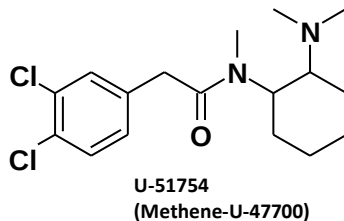


Hydroxy-*N*-desethyl-U-49900

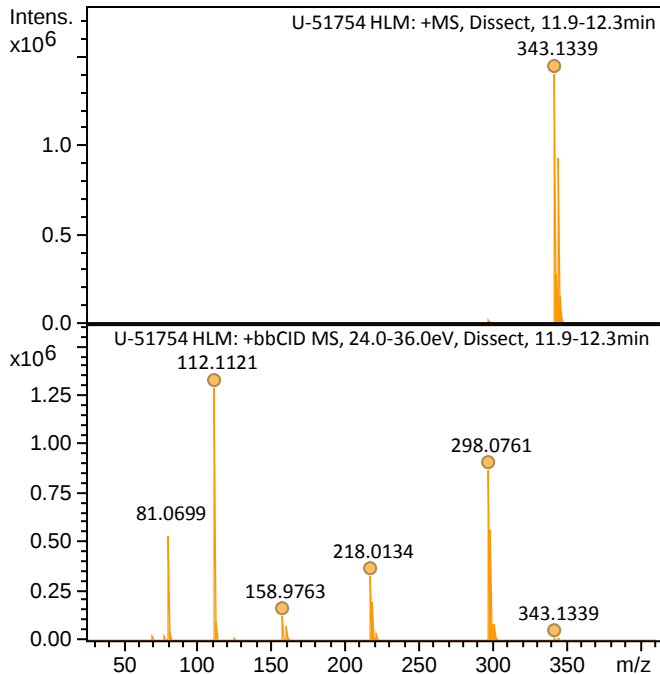


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
69.0702	C5H9	69.0699	-4.8	56.6
79.0543	C6H7	79.0542	-0.9	35.9
97.0651	C6H9O	97.0648	-2.7	n.a.
110.0967	C7H12N	110.0964	-2.3	n.a.
124.1124	C8H14N	124.1121	-2.4	n.a.
142.1227	C8H16NO	142.1226	-0.7	n.a.
172.9556	C7H3Cl2O	172.9555	-0.1	14.3
203.9977	C8H8Cl2NO	203.9977	0.1	26.4
300.0554	C14H16Cl2NO2	300.0553	-0.6	10.2
314.0710	C15H18Cl2NO2	314.0709	-0.3	40.1
345.1133	C16H23Cl2N2O2	345.1131	-0.7	16

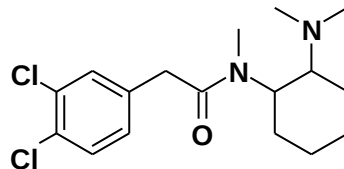
MS-Spectra of *in vitro* phase I metabolites produced in a pooled human liver microsomes (pHLM) assay with subsequent identification by LC-qToF-MS analysis



Parent compound

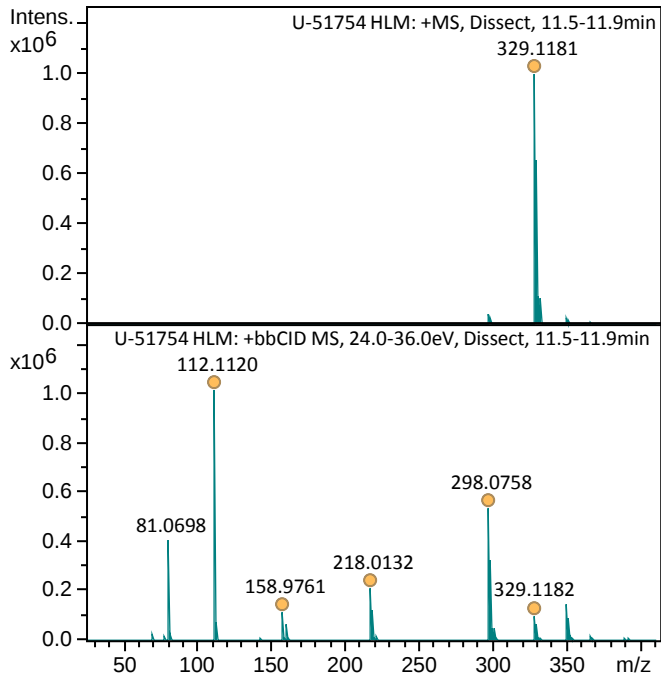


U-51754

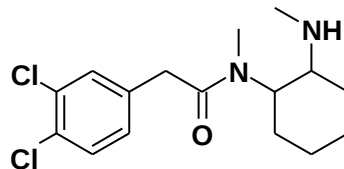


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
70.0653	C4H8N	70.0651	-2.1	n.a.
81.0699	C6H9	81.0699	-0.3	1.2
112.1121	C7H14N	112.1121	-0.6	2.8
158.9763	C7H5Cl2	158.9763	-0.1	12.3
218.0134	C9H10Cl2NO	218.0134	0.1	11.4
298.0761	C15H18Cl2NO	298.0760	-0.4	8.7
343.1339	C17H25Cl2N2O	343.1338	-0.3	26.6

1. N-dealkylation

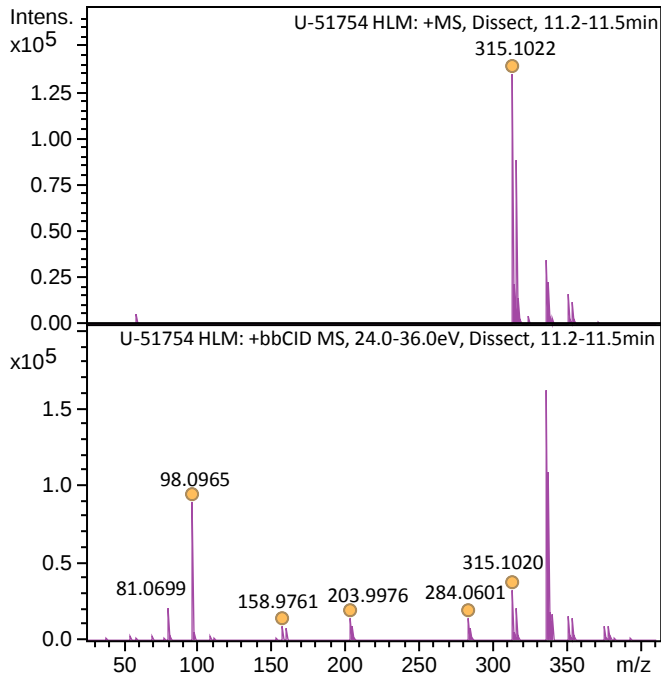


N-demethyl-U-51754

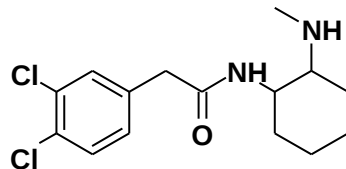


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
70.0652	C4H8N	70.0651	-1.6	5.6
81.0698	C6H9	81.0699	0.7	1.1
112.1120	C7H14N	112.1121	0.2	4.9
158.9761	C7H5Cl2	158.9763	0.9	6.2
218.0132	C9H10Cl2NO	218.0134	0.8	13.4
298.0758	C15H18Cl2NO	298.0760	0.5	20
329.1181	C16H23Cl2N2O	329.1182	0.1	6.5

2. N-dealkylation

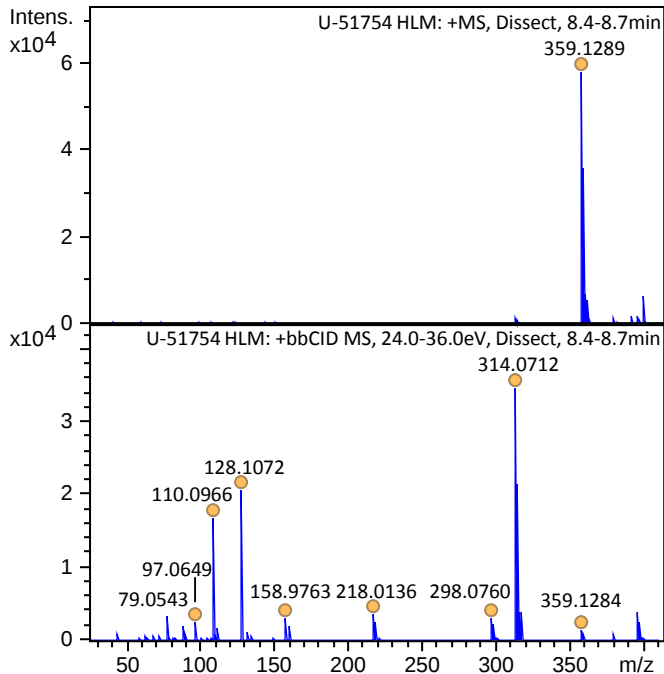


N,N-didemethyl-U-51754

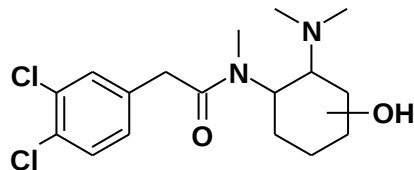


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
70.0652	C4H8N	70.0651	-1.7	n.a.
81.0699	C6H9	81.0699	0.1	31.7
98.0965	C6H12N	98.0964	-0.3	3.3
158.9761	C7H5Cl2	158.9763	1.2	133.2
203.9976	C8H8Cl2NO	203.9977	0.7	8.4
284.0601	C14H16Cl2NO	284.0603	0.7	24.6
315.1020	C15H21Cl2N2O	315.1025	1.7	9.2

3. Hydroxylation

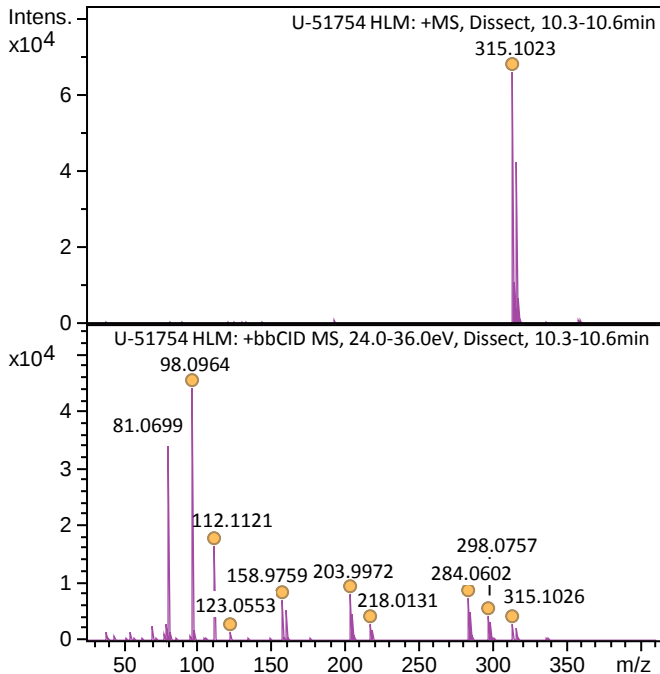


Hydroxy-U-51754

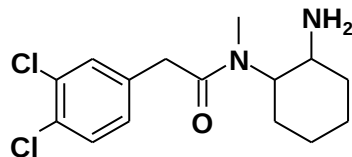


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
79.0543	C6H7	79.0542	-0.6	49
97.0649	C6H9O	97.0648	-1.2	n.a.
110.0966	C7H12N	110.0964	-1.4	21.3
128.1072	C7H14NO	128.1070	-1.5	18.6
158.9763	C7H5Cl2	158.9763	0	62
218.0136	C9H10Cl2NO	218.0134	-1.1	48.5
298.0760	C15H18Cl2NO	298.0760	0	25.8
314.0712	C15H18Cl2NO2	314.0709	-0.9	15.6
359.1284	C17H25Cl2N2O2	359.1288	0.9	107.2

4. *N*-dealkylation

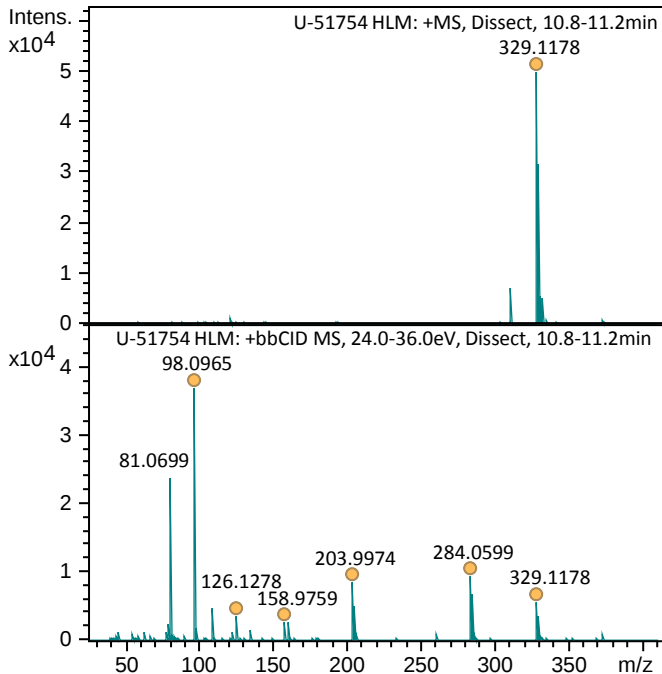


N,N-didemethyl-U-51754

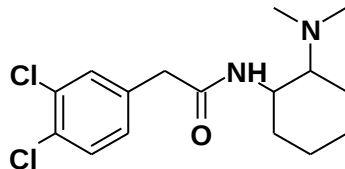


Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
81.0699	C6H9	81.0699	-0.1	13.8
98.0964	C6H12N	98.0964	0.1	15.9
112.1121	C7H14N	112.1121	0.1	n.a.
123.0553	C6H7N2O	123.0553	-0.4	3.4
158.9759	C7H5Cl2	158.9763	2.1	47.1
203.9972	C8H8Cl2NO	203.9977	2.5	28.7
218.0131	C9H10Cl2NO	218.0134	1.4	60.9
284.0602	C14H16Cl2NO	284.0603	0.5	21.3
298.0757	C15H18Cl2NO	298.076	1.1	38
315.1026	C15H21Cl2N2O	315.1025	-0.2	86.8

5. N-dealkylation



N-demethyl-U-51754



Meas. m/z	Ion Formula	m/z	err [ppm]	mSigma
81.0699	C ₆ H ₉	81.0699	0.3	19.6
98.0965	C ₆ H ₁₂ N	98.0964	-0.5	8.7
126.1278	C ₈ H ₁₆ N	126.1277	-0.3	n.a.
158.9759	C ₇ H ₅ Cl ₂	158.9763	2.2	161.6
203.9974	C ₈ H ₈ Cl ₂ NO	203.9977	1.9	22.2
284.0599	C ₁₄ H ₁₆ Cl ₂ NO	284.0603	1.7	38.8
329.1178	C ₁₆ H ₂₃ Cl ₂ N ₂ O	329.1182	1.2	27.6