REVIEWED
By Sarah Collins at 8:34 am, Aug 03, 2023

TS 8/2/2023 CS

Worklist: 6454

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION	
C2023-1133	1	BCK	AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ	
M2023-1618	1	BCK	AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ	

TS 7/25/2023 CS

Worklist: 6445

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
M2023-2351	2	BCK	AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ
P2023-1608	1	UCK	AM 28 Urine Multi-Drug Confirmation Panel 2 by LC-QQ
P2023-1984	1	BCK	AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ

TS 8

AM# 28: Multi-Drug Quantitation by LC-MS/MS

Extraction Date: 07/21/2023
Plate lot#: 220816
Mobile phase A: 5mM Amm Form + 0.01% FA
Blank Blood Lot: Lampire 23A52594
Column: Agilent 120 EC-C18 (2.1x 100-2.7um)

Analyst: Celena Shrum
Plate Retest Date: 02/16/2023—external control ran
Mobile phase B: 0.01% Formic Acid in MeOH
Blank Urine Lot: POC021022
LCMS-QQQ ID: 069901

Pre-Analytic:

☒ 1. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
☒ 2. Ensure correct column is installed and begin mobile phase flow allow to equilibrate ~ 30 minutes.
☒ 3. Create worklist

Analytic:

☒ 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
☒ 2. Urine Hydrolysis: In blank well, add 250µL urine, 40µL BG Turbo, and 100µL Instant Buffer I. Place on plate shaker for 5 minutes.
☒ 3. Using a calibrated pipette, pipette 250µL blood or 250µL hydrolyzed urine in wells of analytical (standards) plate. Pipette ID: 42
☒ 4. Pipette **250µL 0.5M ammonium hydroxide** in wells of analytical plate.
☒ 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
☒ 6. Transfer **300µL of blood+base/urine+base** mixture to corresponding wells of SLE+ plate.
☒ 7. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent). ***(Load at 85-100 PSI- Selector to the right)***
☒ 8. Wait 5 minutes.
☒ 9. Add **900uL ethyl acetate.**
☒ 10. Wait 5 minutes.
☒ 11. Apply positive pressure for approx. 15 seconds. ***(10-15 PSI- Selector to the left).***
☒ 12. Add **900uL ethyl acetate.**
☒ 13. Wait 5 minutes.
☒ 14. Apply positive pressure for approx. 15 seconds. ***(10-15 PSI- Selector to the left).***
☒ 15. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C.
☒ 16. Add 50µL 1% HCl in MeOH to wells and place plate cover on plate before drying. This step is required for urine samples, but optional for blood samples.
☒ 17. Reconstitute in 100µL 20% LC MeOH and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

☒ 1. Create batch and process data.
☒ 2. Make necessary changes to integration limits
☒ 3. Integration linear and R^2 values ≥0.98 for each analyte.
☒ 4. For unknown samples and controls: response ratio within 20% of average of controls and standards, RT within +/- 5% (tramadol RT +/-2%), S/N for primary transition >10 and secondary transitions >5.
☒ 5. Did all QCs pass for each analyte? Yes, see comments Add Control data to QC tracking spreadsheet.
☒ 6. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports.

COMMENTS: Tamara Salazar included case samples with this run. Celena Shrum acted as the primary analyst and performed steps 4-17.
I, Tamara Salazar, approve of all steps utilized in this method. TS

Compounds evaluated: 10-hydroxycarbazepine, 9-hydroxyrisperidone, Amitriptyline, Flurazepam (5-100), Maprotiline (5-100), Methocarbamol (5-500), Norketamine, Nortriptyline, Topiramate (5-100)

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	1	2	3	4	5	6	7	8	9	10	11	12
A	IS + Cal. 1	IS + QC_1	M2023-2351-2_TS									
B	IS + Cal. 2	IS + QC_2	P2023-1984-1_TS									
C	IS + Cal. 3	IS + QC_3	Urine Negative									
D	IS + Cal. 4	IS + QC_4	Urine External Ctrl									
E	IS + Cal. 5	Neg Blood	P2023-1608-1_TS									
F	IS + Cal. 6	Blood External Ctrl										
G	IS + Cal. 7	M2023-1618-1_CS										
H	IS + Cal. 8	C2023-1133-1_CS										

All wells to contain 60 µl of Trapping Solution

Samples were moved to columns 5-7 in the SLE portion of the extraction (A1 was moved to A5, E2 was moved to E6, etc.).

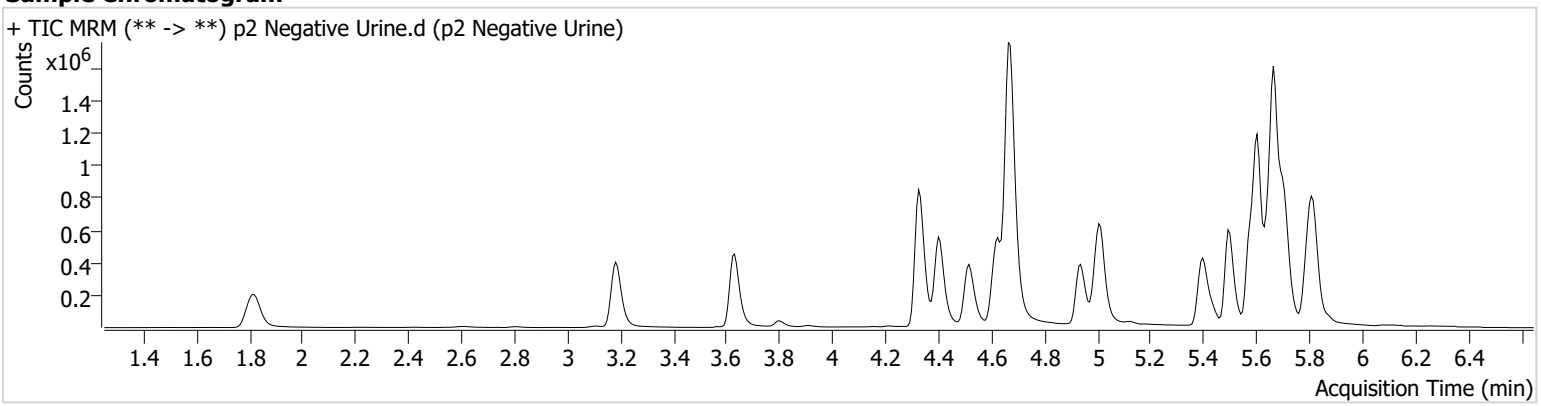
TS CS

AM #28 Multi-Drug Quant. Results

Batch results	D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Calibration Last Update	7/27/2023 8:29:47 AM

Instrument	Falco (069901)	**Data File**	p2 Negative Urine.d
Type	Sample	**Sample**	p2 Negative Urine
Acq. Method	AM 28 MDQ P2 Updated 081022 CS.m	**Operator**	Celena Shrum
Sample Position	P2-C7	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	5		
Acq. Date-Time	7/23/2023 9:46:09 AM		
Sample Info.			

Sample Chromatogram



TS 4

Idaho State Police Forensic Services

AM #28 Blood/Urine Multi-Drug Confirmatory Analysis by LCMS-QQQ---Panel 2

Methanol External Control Solution (Lot: 011922)

100 ul each 1 mg/mL stock solution in 9800 ul MeOH

Component	*Source*	*Source Lot Number*	*Expiration Date*
Methanol (LCMS)	Fisher	215245	
Amitriptyline	Cerilliant	FN02202004	03/31/2025
Flurazepam	Cerilliant	FE08231902	11/30/2024
Prepared:	01/19/2022		
Prepared By:	Sarah Collins		
Expires:	01/19/2023		

Blood External Control Solution (Lot: WS011922)

100 ul of methanol external control solution was added to 9900ul of blood. Approximately 100ng/mL of each compound.

Component	*Source*	*Source Lot Number*
Negative Blood	Lampire	20L20725
Methanol External Control Solution	-	011922
Prepared:	01/19/2022	
Prepared by:	Sarah Collins	
Expires:	01/19/2023	

Only urine external control used. Expiration date not applicable per analytical method #19.

Urine External Control Solution (Lot: WS011922)

100 ul of methanol external control solution was added to 9900ul of urine. Approximately 100ng/mL of each compound.

Component	*Source*	*Source Lot Number*
Negative Urine		POC031319
Methanol External Control Solution	-	011922
Prepared:	01/19/2022	
Prepared by:	Sarah Collins	
Expires:	01/19/2023	

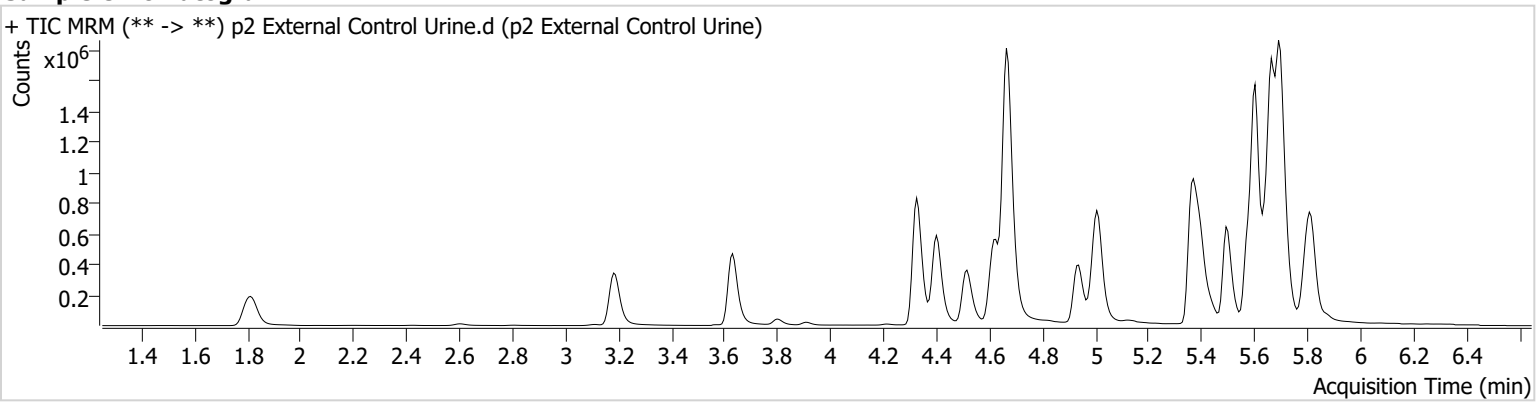
TS

AM #28 Multi-Drug Quant. Results

Batch results	D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Calibration Last Update	7/27/2023 8:29:47 AM

Instrument	Falco (069901)	**Data File**	p2 External Control Urine.d
Type	Sample	**Sample**	p2 External Control Urine
Acq. Method	AM 28 MDQ P2 Updated 081022 CS.m	**Operator**	Celena Shrum
Sample Position	P2-D7	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	5		
Acq. Date-Time	7/23/2023 9:56:54 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amitriptyline	5.701	574415	2062.93	84.9	1677.82	447634	48.9292 ng/ml
Flurazepam	5.362	2043376	697.99	12.5	3030.50	665576	83.1139 ng/ml

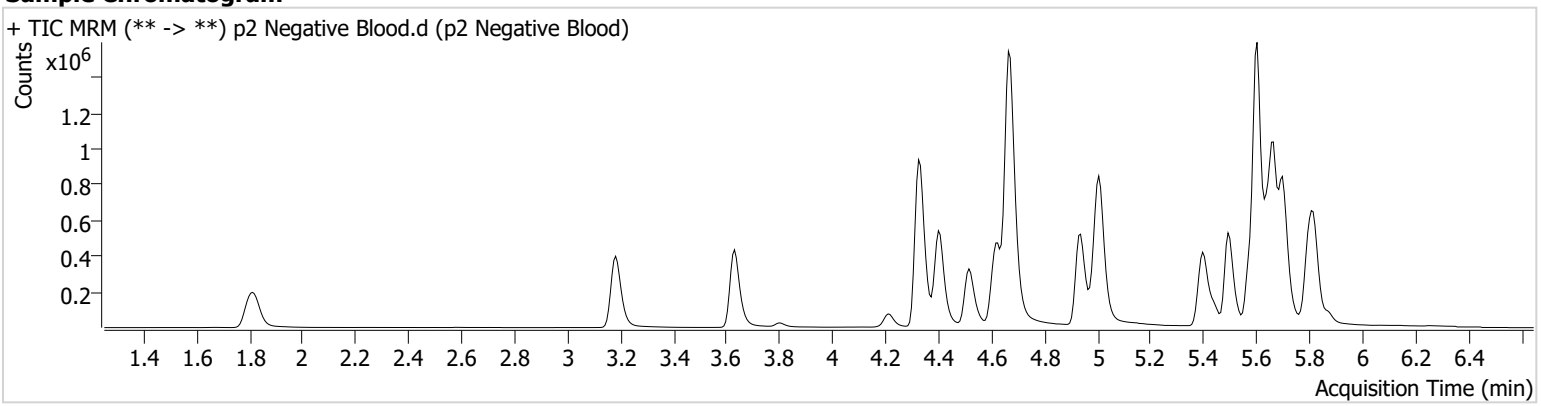
TS

AM #28 Multi-Drug Quant. Results

Batch results	D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Calibration Last Update	7/27/2023 8:29:47 AM

Instrument	Falco (069901)	**Data File**	p2 Negative Blood.d
Type	Sample	**Sample**	p2 Negative Blood
Acq. Method	AM 28 MDQ P2 Updated 081022 CS.m	**Operator**	Celena Shrum
Sample Position	P2-E6	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	5		
Acq. Date-Time	7/23/2023 7:37:26 AM		
Sample Info.			

Sample Chromatogram



TS

Idaho State Police Forensic Services

AM #28 Blood/Urine Multi-Drug Confirmatory Analysis by LCMS-QQQ---Panel 2

Methanol External Control Solution (Lot: 030623)

100 ul each 1 mg/mL stock solution in 9800 ul MeOH

Component	***Source***	***Source Lot Number***	***Expiration Date***
Methanol (LCMS)	Fisher	220776	N/A
Amitriptyline	Cerilliant	FN02202004	03/31/2025
Flurazepam	Cerilliant	FE08231902	11/30/2024
Prepared:	03/06/2023		
Prepared By:	Celena Shrum		
Expires:	03/06/2024		

Blood External Control Solution (Lot: WS030623)

100 ul of methanol external control solution was added to 9900ul of blood. Approximately 100ng/mL of each compound.

Component	***Source***	***Source Lot Number***
Negative Blood	Lampire 23A52593	
Methanol External Control Solution	-	030623
Prepared:	03/06/2023	
Prepared by:	Celena Shrum	
Expires:	03/06/2024	

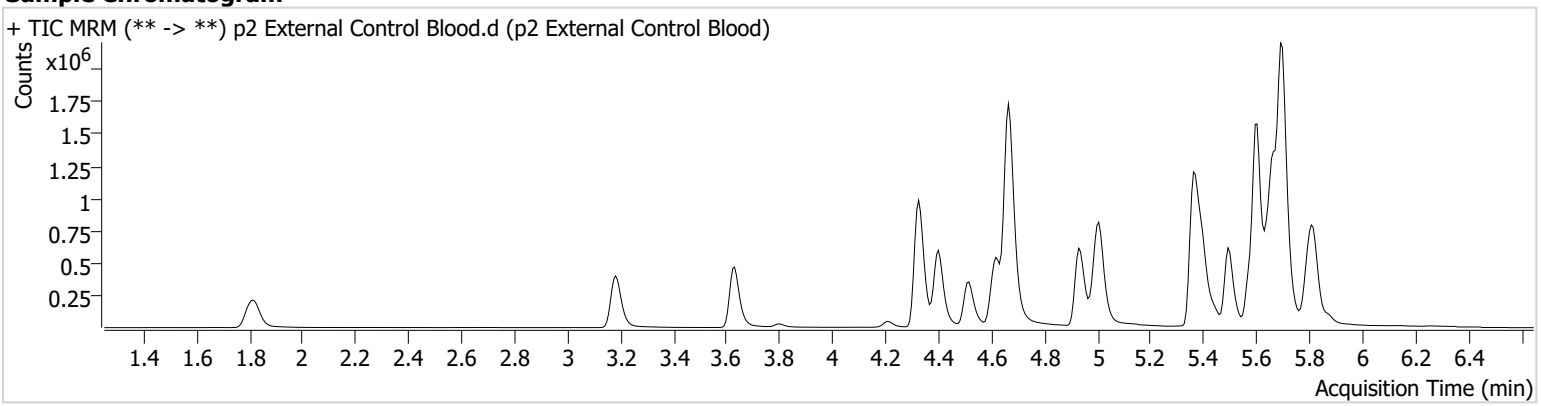
TS CS

AM #28 Multi-Drug Quant. Results

Batch results	D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Calibration Last Update	7/27/2023 8:29:47 AM

Instrument	Falco (069901)	**Data File**	p2 External Control Blood.d
Type	Sample	**Sample**	p2 External Control Blood
Acq. Method	AM 28 MDQ P2 Updated 081022 CS.m	**Operator**	Celena Shrum
Sample Position	P2-F6	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	5		
Acq. Date-Time	7/23/2023 7:48:09 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amitriptyline	5.694	875910	6910.06	83.6	3788.66	380085	87.6663 ng/ml
Flurazepam	5.362	2673274	36843.88	12.3	547.60	904421	80.0604 ng/ml

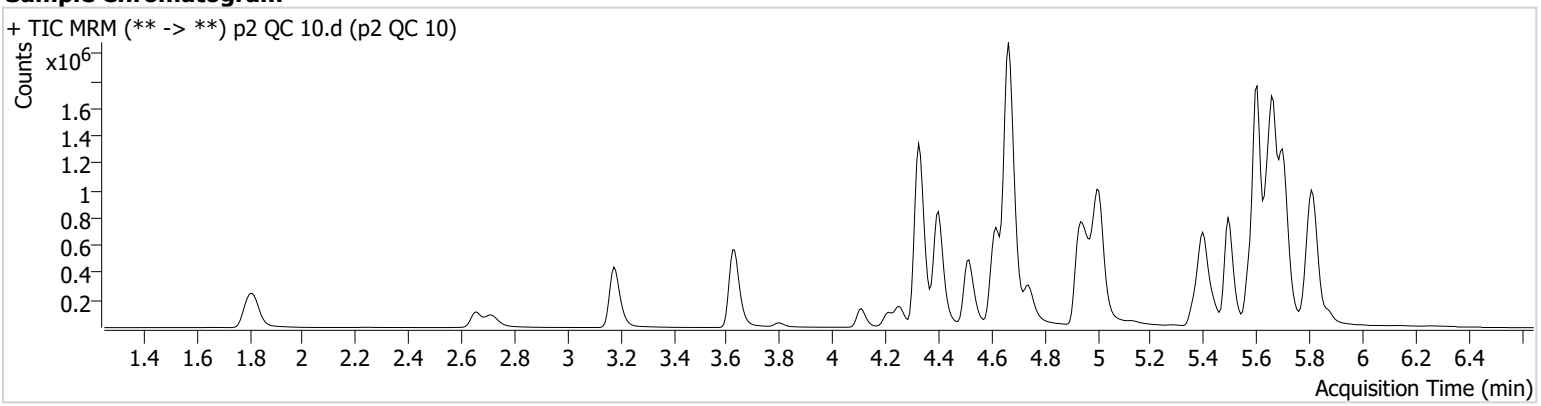
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Calibration Last Update 7/27/2023 8:29:47 AM

Instrument	Falco (069901)	**Data File**	p2 QC 10.d
Type	QC	**Sample**	p2 QC 10
Acq. Method	AM 28 MDQ P2 Updated 081022 CS.m	**Operator**	Celena Shrum
Sample Position	P2-A6	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	5		
Acq. Date-Time	7/23/2023 6:22:18 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
10-OH-Carbazepine	5.008	236567	192.50	90.7	832.80	1073805	10.1987 ng/ml
9-Hydroxyrisperidone	4.670	19259	424.74	3664.2	3245.85	2834854	11.1230 ng/ml
Amitriptyline	5.694	118033	869.45	96.2	644.67	422055	10.8644 ng/ml
Flurazepam	5.362	368407	2715.41	12.4	323.48	1011837	10.8238 ng/ml
Maprotiline	5.667	56912	459.85	216.7	620.36	422055	11.4408 ng/ml
Methocarbamol	4.416	57889	1858.52	104.4	3823.40	359580	10.6771 ng/ml
Norketamine	4.112	273272	5336.25	26.2	187.38	2785766	10.8358 ng/ml
Nortriptyline	5.716	101659	441.46	34.2	722.27	310957	10.1503 ng/ml
Topiramate	4.984	5543	10597.05	45.2	8.84	67665	6.4898 ng/ml

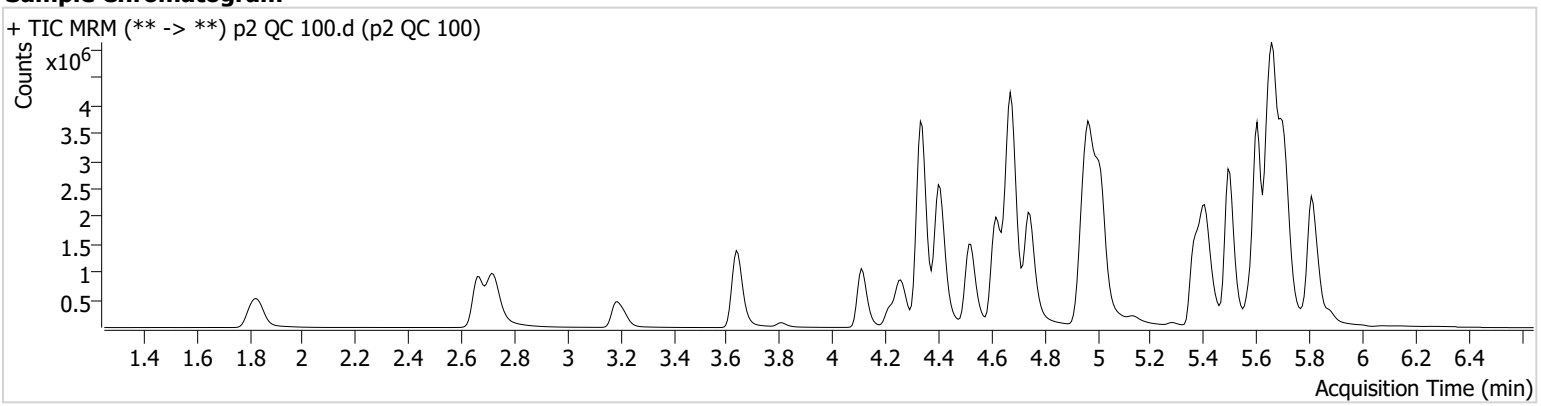
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Calibration Last Update 7/27/2023 8:29:47 AM

Instrument	Falco (069901)	**Data File**	p2 QC 100.d
Type	QC	**Sample**	p2 QC 100
Acq. Method	AM 28 MDQ P2 Updated 081022 CS.m	**Operator**	Celena Shrum
Sample Position	P2-B6	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	5		
Acq. Date-Time	7/23/2023 10:39:49 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
10-OH-Carbazepine	5.015	1935667	227.99	92.2	1119.49	828466	100.8435 ng/ml
9-Hydroxyrisperidone	4.676	163956	670.80	3884.7	8566.11	2391118	101.1426 ng/ml
Amitriptyline	5.694	1052115	2233.24	91.5	2858.14	370611	107.9342 ng/ml
Flurazepam	5.362	3233320	592.59	12.1	2580.65	567349	153.3448 ng/ml
Maprotiline	5.674	409711	1976.66	249.9	2162.34	370611	100.2616 ng/ml
Methocarbamol	4.423	367431	1548.45	103.4	33604.41	242656	104.5553 ng/ml
Norketamine	4.112	2261538	6130.95	25.8	13969.01	2446607	107.6118 ng/ml
Nortriptyline	5.716	838152	416100.33	35.0	4625.99	260375	93.6057 ng/ml
Topiramate	4.984	38838	67307.81	37.5	8914.85	52261	57.6273 ng/ml

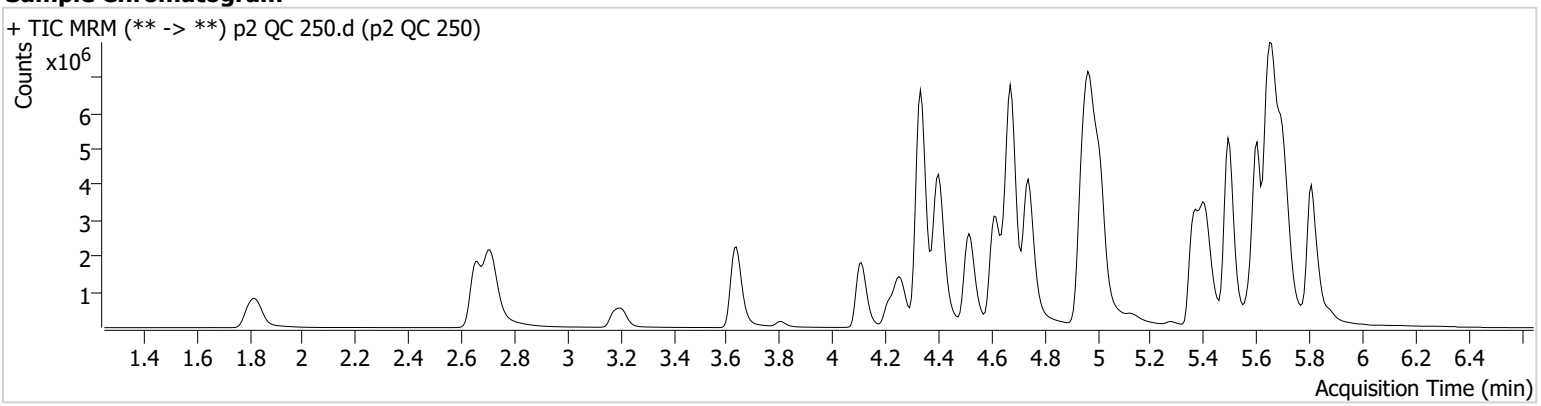
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Calibration Last Update 7/27/2023 8:29:47 AM

Instrument	Falco (069901)	**Data File**	p2 QC 250.d
Type	QC	**Sample**	p2 QC 250
Acq. Method	AM 28 MDQ P2 Updated 081022 CS.m	**Operator**	Celena Shrum
Sample Position	P2-C6	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	5		
Acq. Date-Time	7/23/2023 6:43:46 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio		S/N	ISTD Resp.	Final Conc.
10-OH-Carbazepine	5.008	3669344	3274.48	87.5		5005.29	631068	249.8258 ng/ml
9-Hydroxyrisperidone	4.670	329171	2768.84	3991.6		64052.76	1814228	265.6189 ng/ml
Amitriptyline	5.694	2071924	6486.64	91.3		44948.82	306388	256.7532 ng/ml
Flurazepam	5.362	6766917	359188.11	12.0		6388.46	304202	595.3631 ng/ml
Maprotiline	5.667	625625	7933.25	314.8	High	12907.40	306388	185.9507 ng/ml
Methocarbamol	4.423	536668	1689.12	103.0		15902.72	150654	246.6371 ng/ml
Norketamine	4.112	4306454	11725.06	25.2		8086.35	2072370	242.7364 ng/ml
Nortriptyline	5.716	1565032	57335.07	34.6		4236.93	186729	242.5705 ng/ml
Topiramate	4.977	65674	59426.26	37.7		20813.45	36605	138.9057 ng/ml

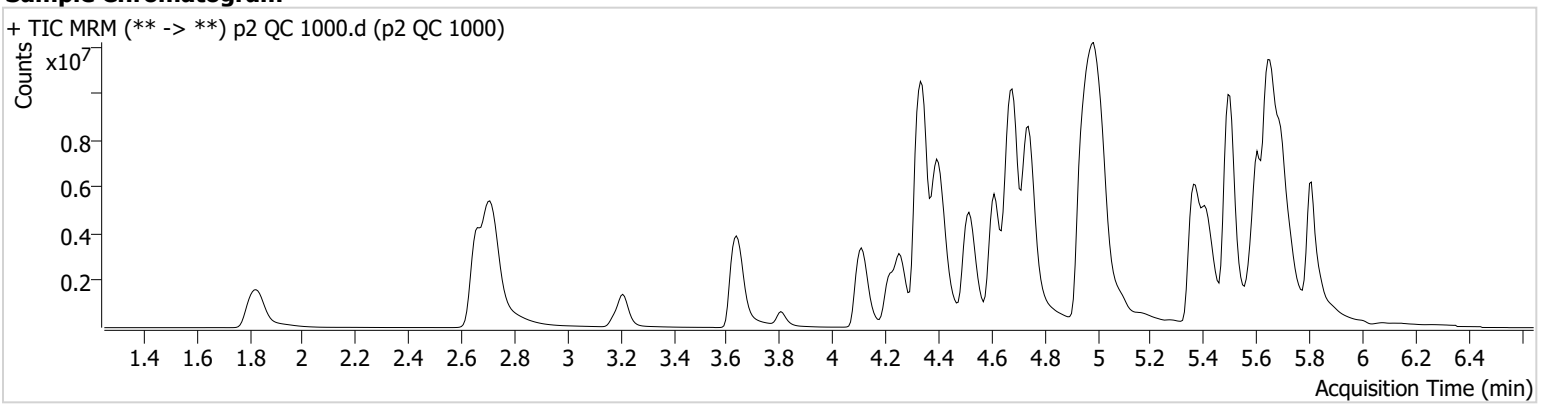
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Calibration Last Update 7/27/2023 8:29:47 AM

Instrument	Falco (069901)	**Data File**	p2 QC 1000.d
Type	QC	**Sample**	p2 QC 1000
Acq. Method	AM 28 MDQ P2 Updated 081022 CS.m	**Operator**	Celena Shrum
Sample Position	P2-D6	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	5		
Acq. Date-Time	7/23/2023 7:05:15 AM		
Sample Info.			

Sample Chromatogram

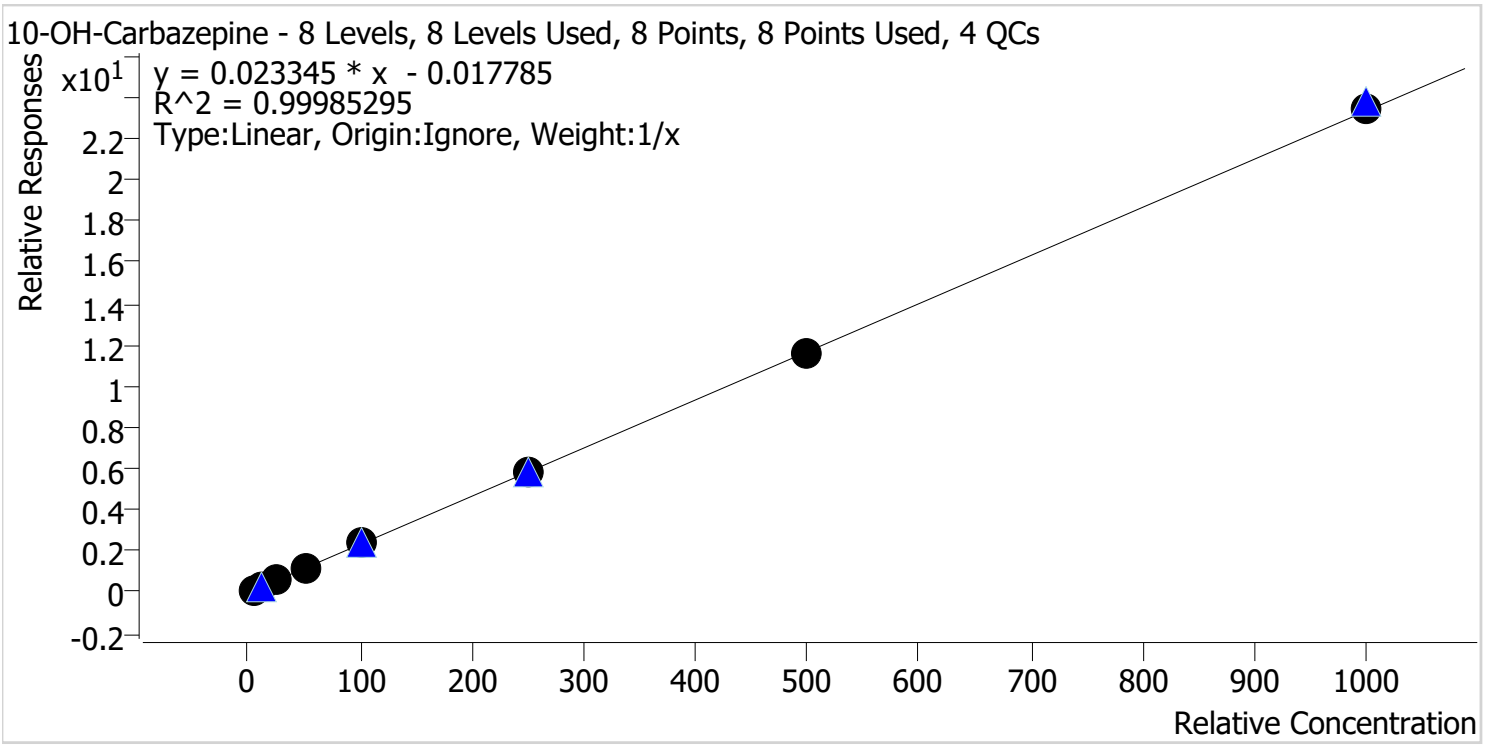


Name	RT	Resp.	S/N	Ratio		S/N	ISTD Resp.	Final Conc.
10-OH-Carbazepine	5.015	7873635	5404.02	89.7		72896.68	331237	1018.9681 ng/ml
9-Hydroxyrisperidone	4.676	685586	23347.07	3668.6		405119.26	919810	1087.3702 ng/ml
Amitriptyline	5.694	4091549	1967.27	88.1		2624.02	148444	1045.7063 ng/ml
Flurazepam	5.362	14256841	225193.62	12.2		6503.49	71894	5298.7645 ng/ml
Maprotiline	5.667	518575	11585.60	673.8	High	300180.07	148444	318.7675 ng/ml
Methocarbamol	4.430	741946	1172.43	102.2		22876.36	32192	1598.4208 ng/ml
Norketamine	4.112	9795138	2369.71	24.9		22516.31	1246251	919.9134 ng/ml
Nortriptyline	5.722	2689349	23987.33	34.3		35016.14	80720	962.1193 ng/ml
Topiramate	4.991	105308	383095.14	40.2		19261.72	9804	830.8238 ng/ml

TS cs

AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results	D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Last Cal. Update	7/27/2023 8:29 AM
Analyst Name	ISP\Datastor
Analyte	10-OH-Carbazepine
Internal Standard	10-OH-Carbazepine-13-D6

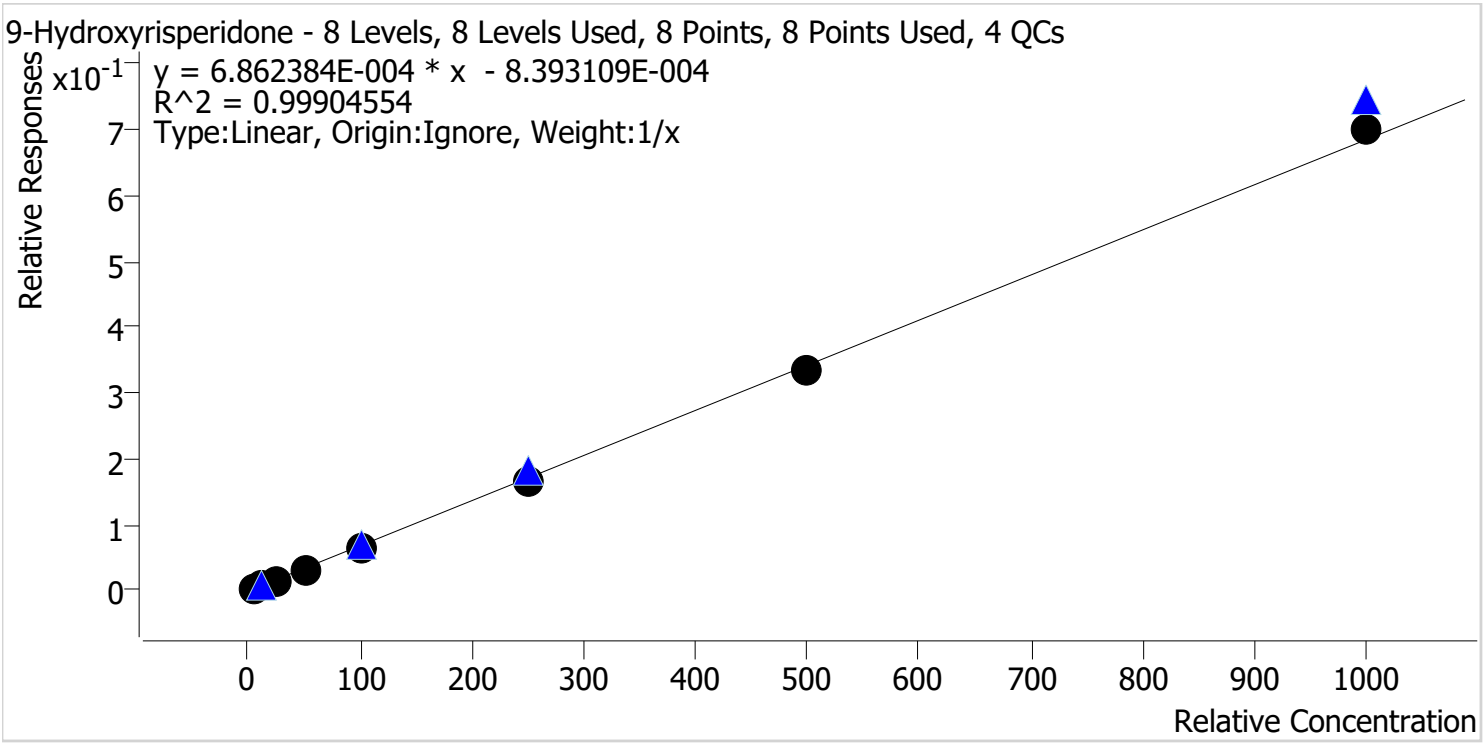


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	5.1	101.3
p2 Cal 2-10ng	2	✔	10.0	10.6	105.5
p2 Cal 3 -25ng	3	✔	25.0	23.9	95.6
p2 Cal 4-50ng	4	✔	50.0	48.3	96.6
p2 Cal 5-100ng	5	✔	100.0	101.3	101.3
p2 Cal 6-250ng	6	✔	250.0	250.8	100.3
p2 Cal 7-500ng	7	✔	500.0	494.2	98.8
p2 Cal 8-1000ng	8	✔	1000.0	1006.0	100.6

TS 4

AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results	D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Last Cal. Update	7/27/2023 8:29 AM
Analyst Name	ISP\Datastor
Analyte	9-Hydroxyrisperidone
Internal Standard	9-OH-Respiridone-D4

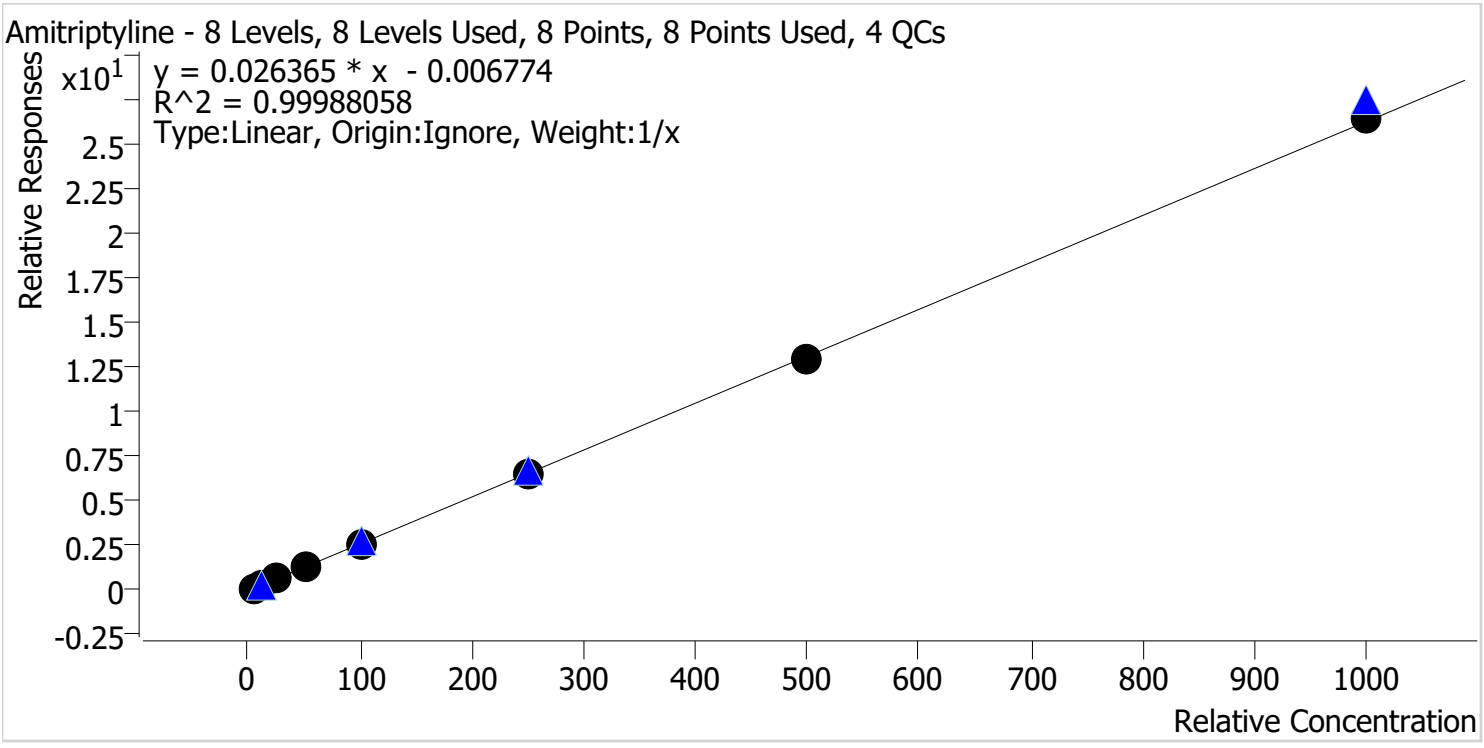


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	5.4	108.3
p2 Cal 2-10ng	2	✔	10.0	11.0	110.1
p2 Cal 3 -25ng	3	✔	25.0	24.2	96.8
p2 Cal 4-50ng	4	✔	50.0	46.1	92.3
p2 Cal 5-100ng	5	✔	100.0	94.0	94.0
p2 Cal 6-250ng	6	✔	250.0	245.6	98.2
p2 Cal 7-500ng	7	✔	500.0	489.5	97.9
p2 Cal 8-1000ng	8	✔	1000.0	1024.1	102.4

TS cs

AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results	D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Last Cal. Update	7/27/2023 8:29 AM
Analyst Name	ISP\Datastor
Analyte	Amitriptyline
Internal Standard	Amitriptyline-D3

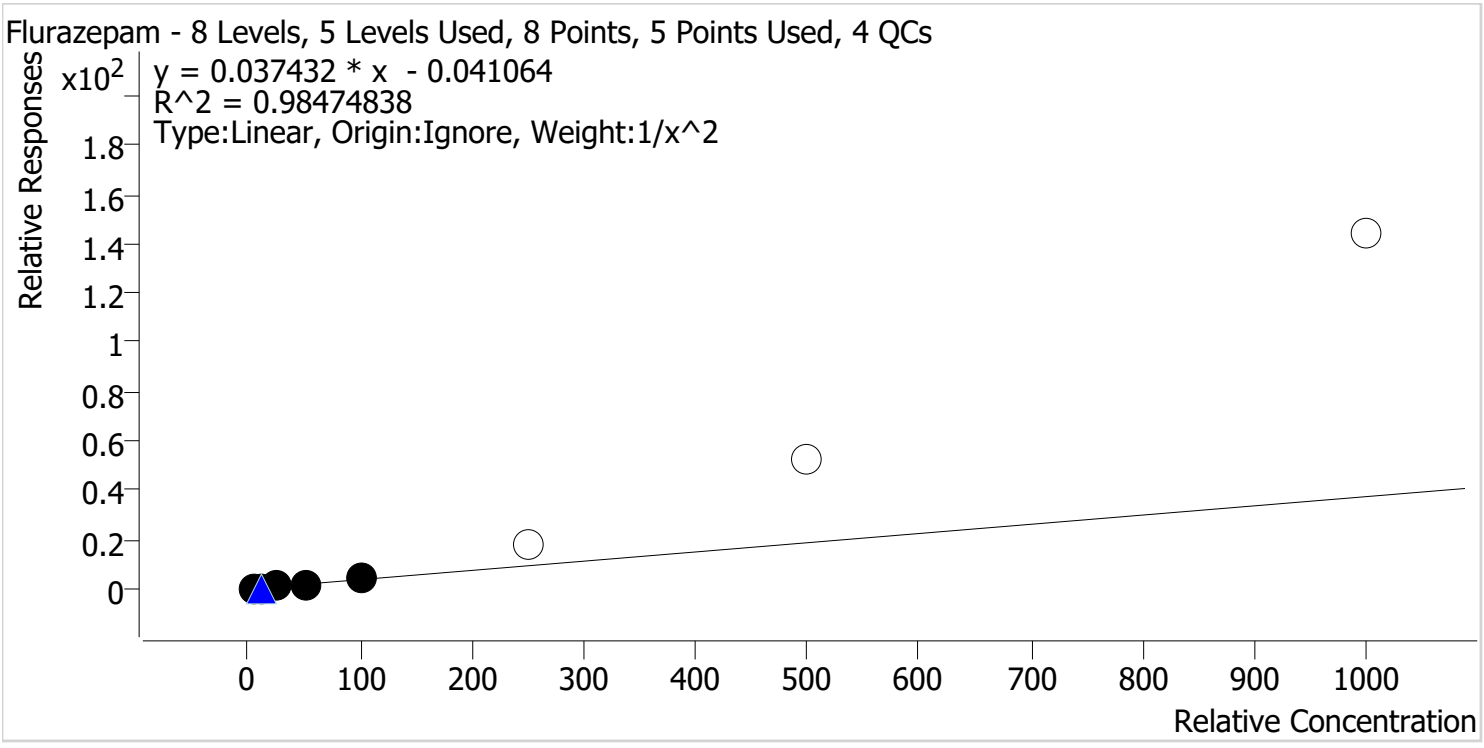


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	5.0	101.0
p2 Cal 2-10ng	2	✔	10.0	10.5	105.0
p2 Cal 3 -25ng	3	✔	25.0	24.7	98.6
p2 Cal 4-50ng	4	✔	50.0	49.1	98.2
p2 Cal 5-100ng	5	✔	100.0	98.0	98.0
p2 Cal 6-250ng	6	✔	250.0	247.7	99.1
p2 Cal 7-500ng	7	✔	500.0	496.4	99.3
p2 Cal 8-1000ng	8	✔	1000.0	1008.7	100.9

TS 4

AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results	D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Last Cal. Update	7/27/2023 8:29 AM
Analyst Name	ISP\Datastor
Analyte	Flurazepam
Internal Standard	Estazolam-D5

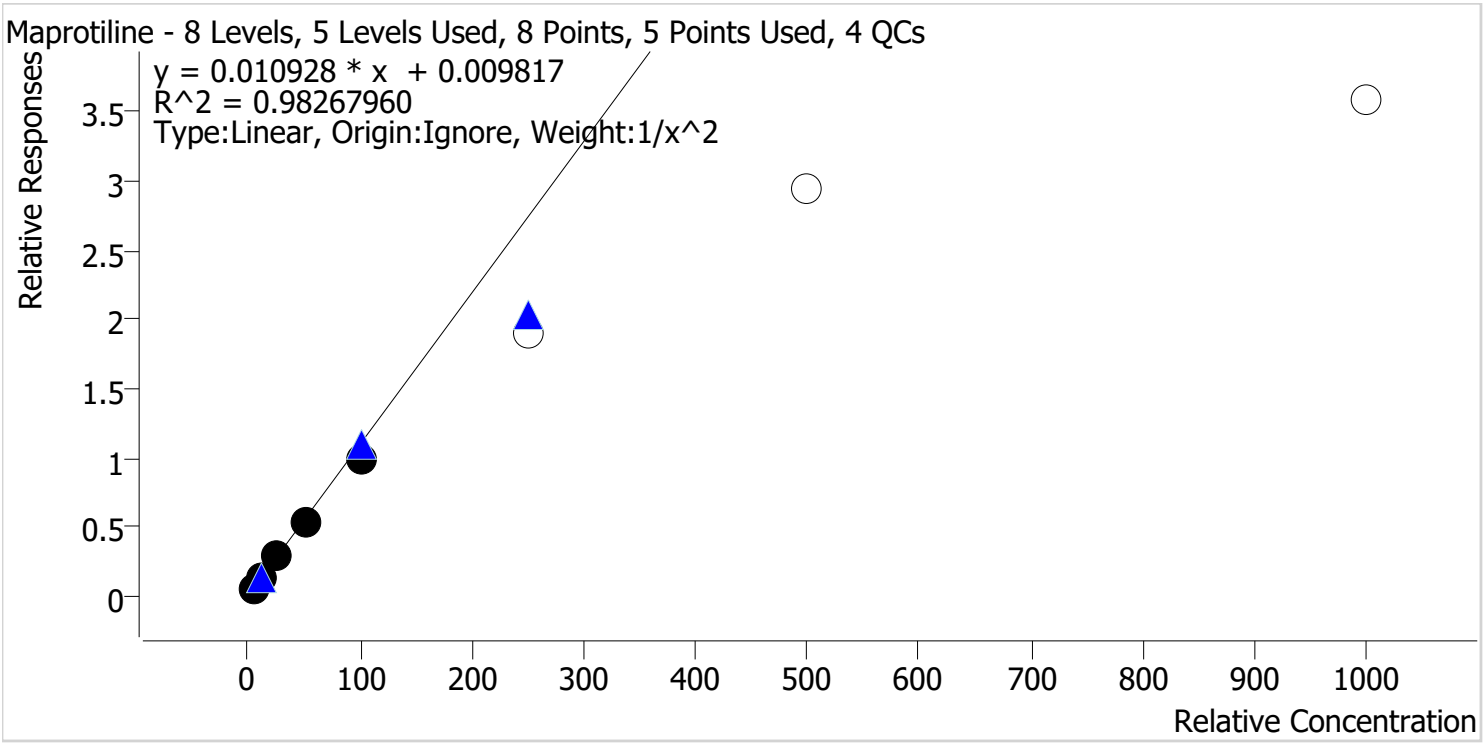


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	5.1	102.5
p2 Cal 2-10ng	2	✔	10.0	9.9	99.1
p2 Cal 3 -25ng	3	✔	25.0	22.1	88.6
p2 Cal 4-50ng	4	✔	50.0	47.7	95.4
p2 Cal 5-100ng	5	✔	100.0	114.4	114.4
p2 Cal 6-250ng	6	✗	250.0	461.8	184.7
p2 Cal 7-500ng	7	✗	500.0	1403.0	280.6
p2 Cal 8-1000ng	8	✗	1000.0	3848.0	384.8

TS CS

AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results	D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Last Cal. Update	7/27/2023 8:29 AM
Analyst Name	ISP\Datastor
Analyte	Maprotiline
Internal Standard	Amitriptyline-D3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	4.6	92.5
p2 Cal 2-10ng	2	✔	10.0	11.4	113.9
p2 Cal 3 -25ng	3	✔	25.0	26.9	107.6
p2 Cal 4-50ng	4	✔	50.0	47.8	95.7
p2 Cal 5-100ng	5	✔	100.0	90.4	90.4
p2 Cal 6-250ng	6	✗	250.0	172.5	69.0
p2 Cal 7-500ng	7	✗	500.0	268.0	53.6
p2 Cal 8-1000ng	8	✗	1000.0	327.2	32.7

TS CS

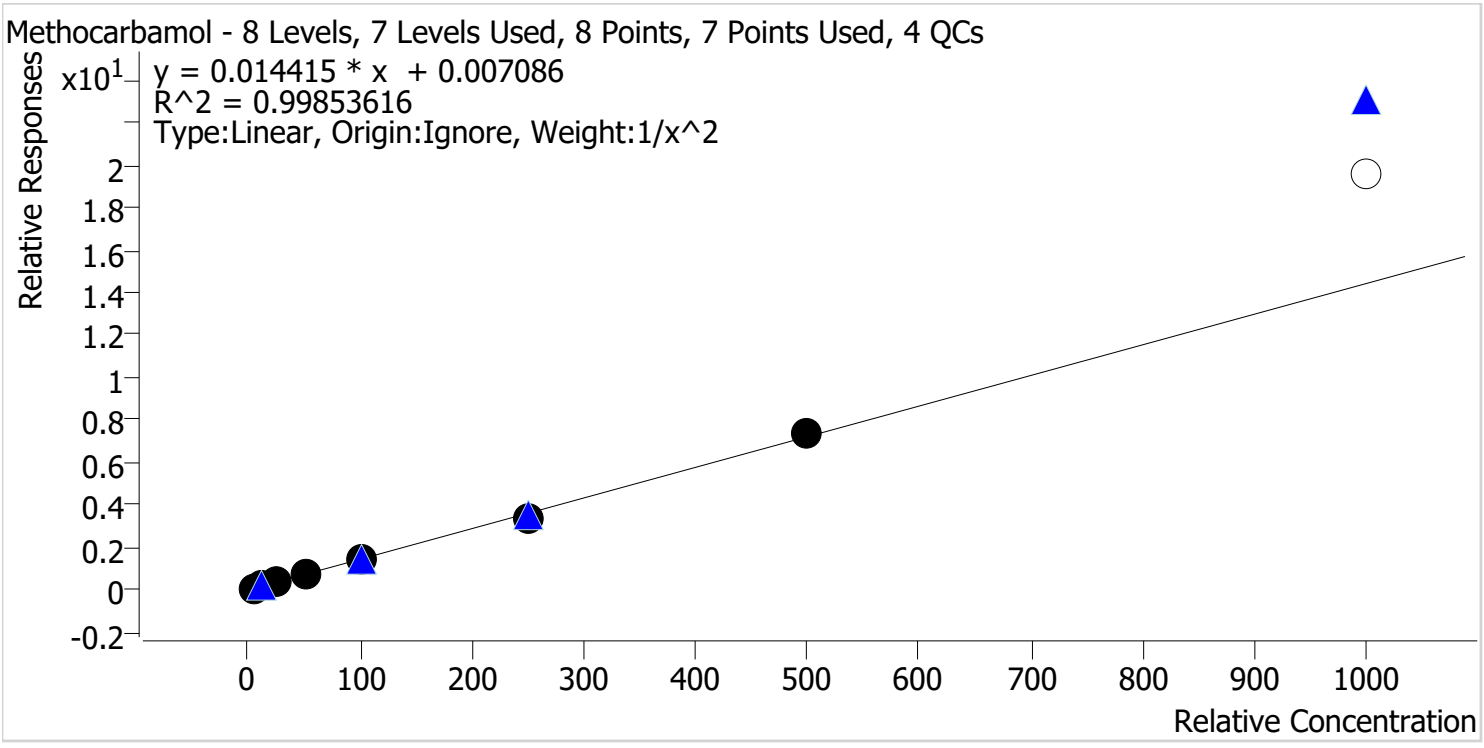
AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin

Last Cal. Update 7/27/2023 8:29 AM

Analyst Name ISP\Datastor

Analyte Methocarbamol **Internal Standard** Flunitrazepam-D7

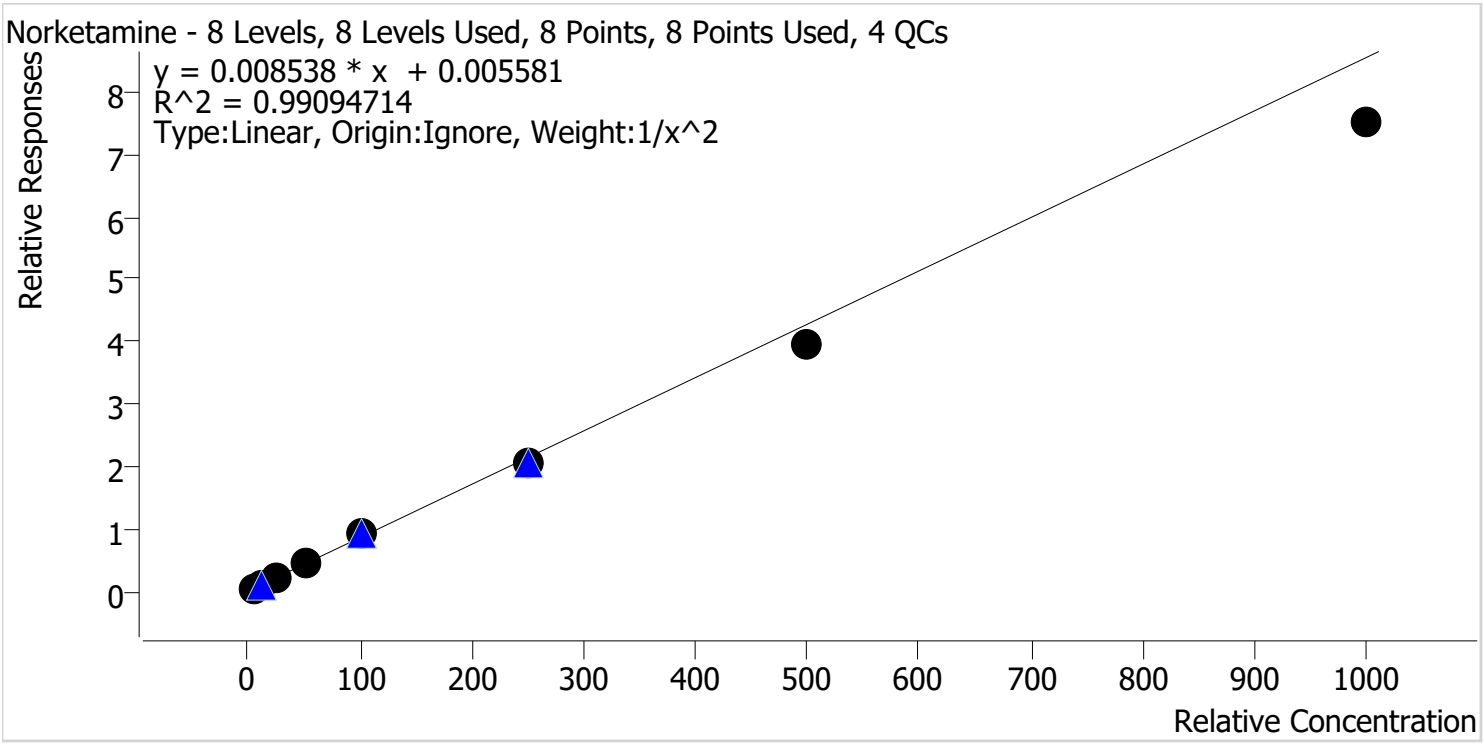


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	4.9	97.8
p2 Cal 2-10ng	2	✔	10.0	10.4	104.0
p2 Cal 3 -25ng	3	✔	25.0	25.4	101.8
p2 Cal 4-50ng	4	✔	50.0	50.0	100.1
p2 Cal 5-100ng	5	✔	100.0	97.6	97.6
p2 Cal 6-250ng	6	✔	250.0	238.4	95.4
p2 Cal 7-500ng	7	✔	500.0	517.0	103.4
p2 Cal 8-1000ng	8	✗	1000.0	1353.3	135.3

TS cs

AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results	D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Last Cal. Update	7/27/2023 8:29 AM
Analyst Name	ISP\Datastor
Analyte	Norketamine
Internal Standard	Methylphenidate-D4

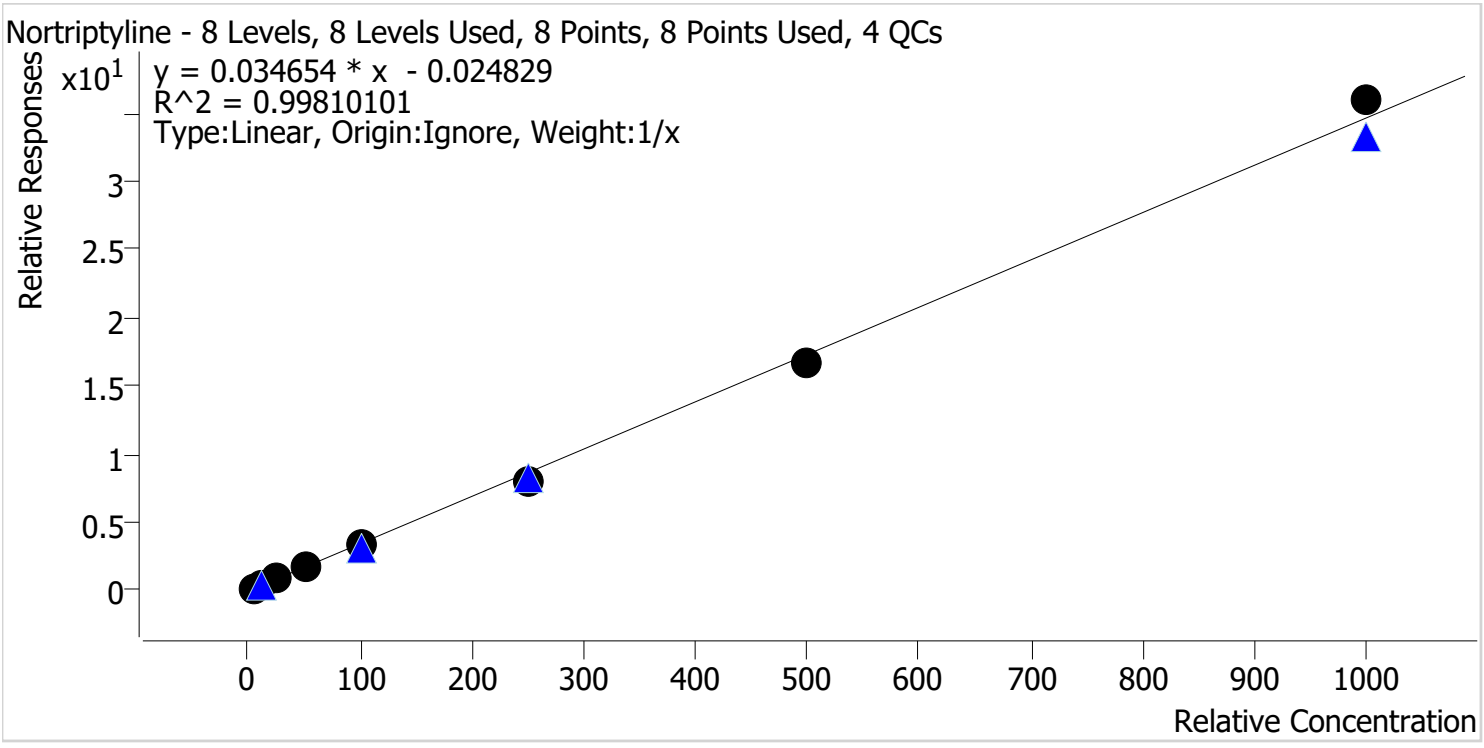


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	4.7	93.6
p2 Cal 2-10ng	2	✔	10.0	10.7	107.4
p2 Cal 3 -25ng	3	✔	25.0	27.3	109.4
p2 Cal 4-50ng	4	✔	50.0	53.6	107.2
p2 Cal 5-100ng	5	✔	100.0	105.7	105.7
p2 Cal 6-250ng	6	✔	250.0	240.0	96.0
p2 Cal 7-500ng	7	✔	500.0	463.4	92.7
p2 Cal 8-1000ng	8	✔	1000.0	879.8	88.0

TS cs

AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results	D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Last Cal. Update	7/27/2023 8:29 AM
Analyst Name	ISP\Datastor
Analyte	Nortriptyline
Internal Standard	Nortriptyline-d3

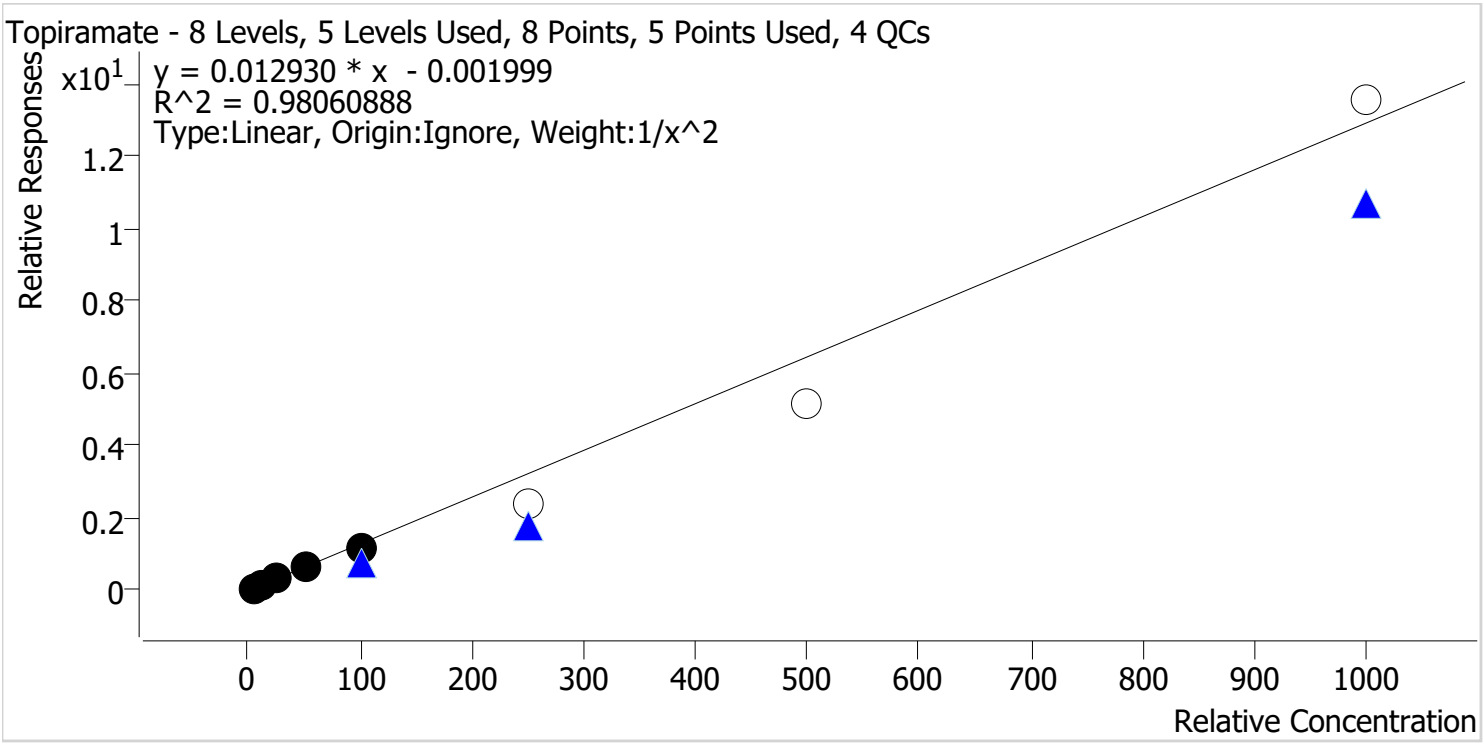


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	5.4	108.5
p2 Cal 2-10ng	2	✔	10.0	10.8	108.2
p2 Cal 3 -25ng	3	✔	25.0	24.2	96.6
p2 Cal 4-50ng	4	✔	50.0	48.6	97.3
p2 Cal 5-100ng	5	✔	100.0	95.4	95.4
p2 Cal 6-250ng	6	✔	250.0	233.3	93.3
p2 Cal 7-500ng	7	✔	500.0	484.8	97.0
p2 Cal 8-1000ng	8	✔	1000.0	1037.5	103.8

TS cs

AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results	D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Last Cal. Update	7/27/2023 8:29 AM
Analyst Name	ISP\Datastor
Analyte	Topiramate
Internal Standard	Topiramate-d12



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	4.9	97.3
p2 Cal 2-10ng	2	✔	10.0	10.0	100.3
p2 Cal 3 -25ng	3	✔	25.0	29.3	117.1
p2 Cal 4-50ng	4	✔	50.0	49.1	98.2
p2 Cal 5-100ng	5	✔	100.0	87.1	87.1
p2 Cal 6-250ng	6	✗	250.0	182.6	73.1
p2 Cal 7-500ng	7	✗	500.0	398.3	79.7
p2 Cal 8-1000ng	8	✗	1000.0	1048.7	104.9

TS CS

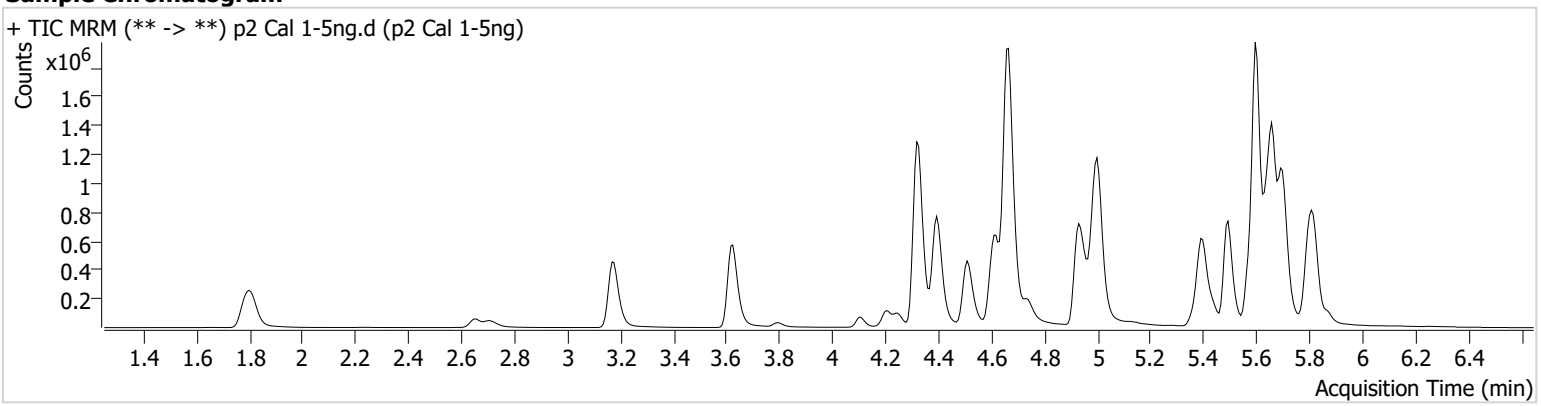
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin

Calibration Last Update 7/27/2023 8:29:47 AM

Instrument	Falco (069901)	**Data File**	p2 Cal 1-5ng.d
Type	Cal	**Sample**	p2 Cal 1-5ng
Acq. Method	AM 28 MDQ P2 Updated 081022 CS.m	**Operator**	Celena Shrum
Sample Position	P2-A5	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	5		
Acq. Date-Time	7/23/2023 4:23:00 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
10-OH-Carbazepine	5.001	149799	181.86	87.1	743.84	1490415	5.0671 ng/ml
9-Hydroxyrisperidone	4.670	8373	260.24	3758.8	2000.58	2911425	5.4139 ng/ml
Amitriptyline	5.694	48426	654.06	93.3	1659.67	383407	5.0476 ng/ml
Flurazepam	5.362	178900	313342.42	12.7	529.91	1186762	5.1242 ng/ml
Maprotiline	5.667	23132	148.02	212.2	508.05	383407	4.6225 ng/ml
Methocarbamol	4.410	32738	900.44	97.2	202.42	421942	4.8911 ng/ml
Norketamine	4.106	139350	319.74	27.0	203.55	3058995	4.6818 ng/ml
Nortriptyline	5.716	41150	50628.74	34.6	6295.90	252118	5.4263 ng/ml
Topiramate	4.977	4691	3741.50	37.6	782.30	77051	4.8633 ng/ml

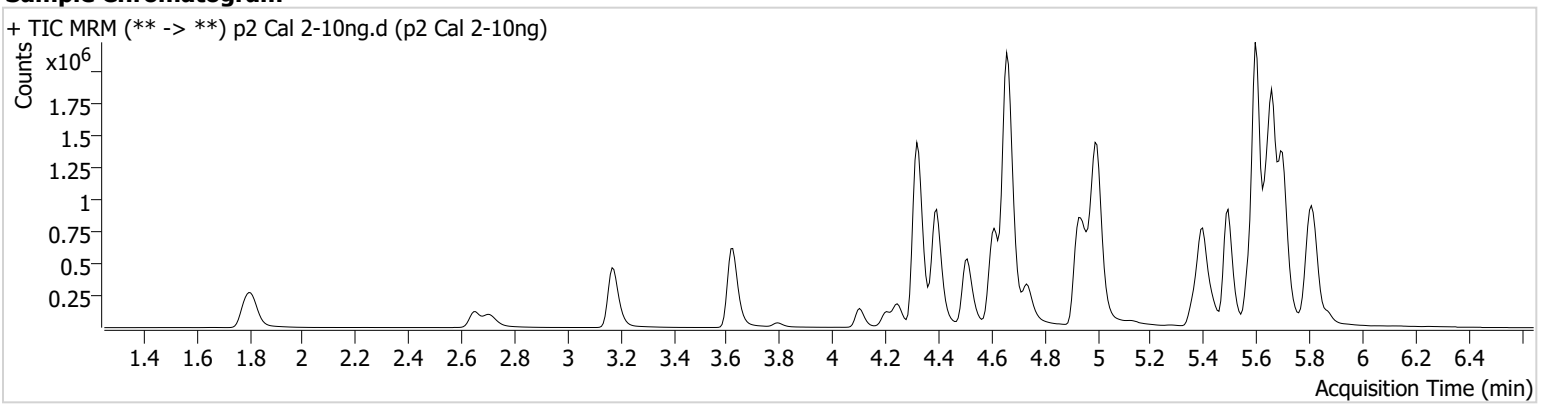
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Calibration Last Update 7/27/2023 8:29:47 AM

Instrument	Falco (069901)	**Data File**	p2 Cal 2-10ng.d
Type	Cal	**Sample**	p2 Cal 2-10ng
Acq. Method	AM 28 MDQ P2 Updated 081022 CS.m	**Operator**	Celena Shrum
Sample Position	P2-B5	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	5		
Acq. Date-Time	7/23/2023 4:33:45 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
10-OH-Carbazepine	5.001	338935	603.97	90.7	2899.15	1483222	10.5501 ng/ml
9-Hydroxyrisperidone	4.663	20004	117.85	3482.1	5632.18	2979568	11.0066 ng/ml
Amitriptyline	5.694	114067	1330.85	94.2	4577.93	422236	10.5037 ng/ml
Flurazepam	5.355	391962	51337.28	12.4	673.22	1188460	9.9078 ng/ml
Maprotiline	5.667	56699	369.58	207.7	335.71	422236	11.3893 ng/ml
Methocarbamol	4.410	64894	909.34	106.9	4074.31	413396	10.3987 ng/ml
Norketamine	4.106	295286	21102.95	26.1	620.43	3035821	10.7387 ng/ml
Nortriptyline	5.716	98155	32763.26	33.8	695.67	280376	10.8186 ng/ml
Topiramate	4.977	10126	160.45	40.1	104.50	79327	10.0265 ng/ml

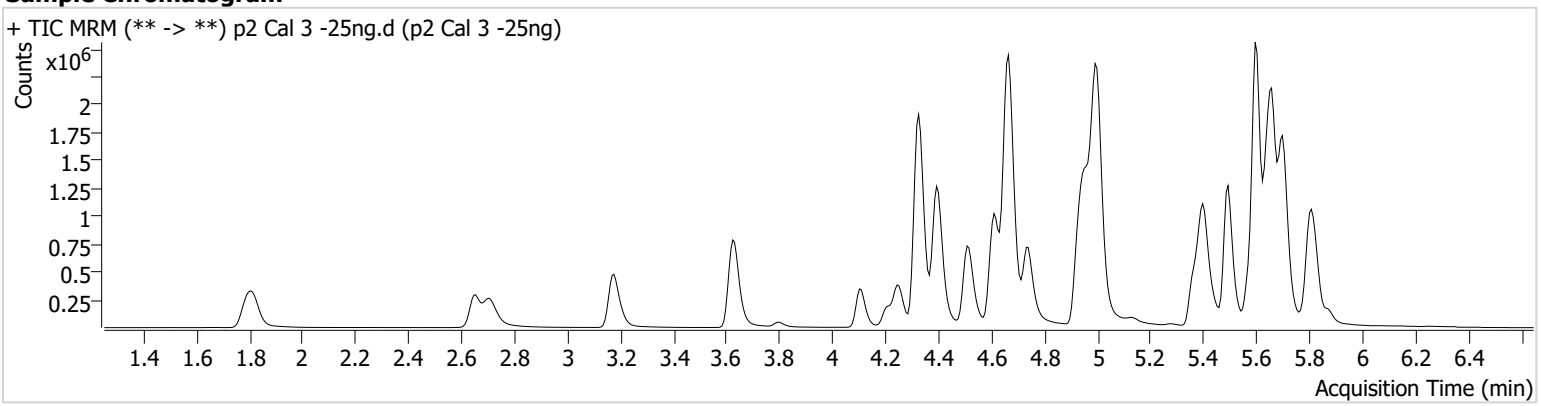
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Calibration Last Update 7/27/2023 8:29:47 AM

Instrument	Falco (069901)	**Data File**	p2 Cal 3 -25ng.d
Type	Cal	**Sample**	p2 Cal 3 -25ng
Acq. Method	AM 28 MDQ P2 Updated 081022 CS.m	**Operator**	Celena Shrum
Sample Position	P2-C5	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	5		
Acq. Date-Time	7/23/2023 4:44:30 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
10-OH-Carbazepine	5.001	895994	1452.56	91.6	2463.93	1659610	23.8877 ng/ml
9-Hydroxyrisperidone	4.670	44700	875.43	3668.8	2686.35	2835749	24.1934 ng/ml
Amitriptyline	5.694	213878	2260.46	97.6	1140.10	332522	24.6533 ng/ml
Flurazepam	5.362	919951	3113.86	12.0	86838.74	1167923	22.1398 ng/ml
Maprotiline	5.667	100997	1270.01	217.0	3501.80	332522	26.8947 ng/ml
Methocarbamol	4.410	149624	4569.35	102.5	2623.35	400147	25.4491 ng/ml
Norketamine	4.106	718900	12986.25	25.2	1117.81	3007238	27.3458 ng/ml
Nortriptyline	5.716	167545	114808.91	35.0	1040.95	206286	24.1536 ng/ml
Topiramate	4.984	27287	194.65	35.9	20134.62	72461	29.2778 ng/ml

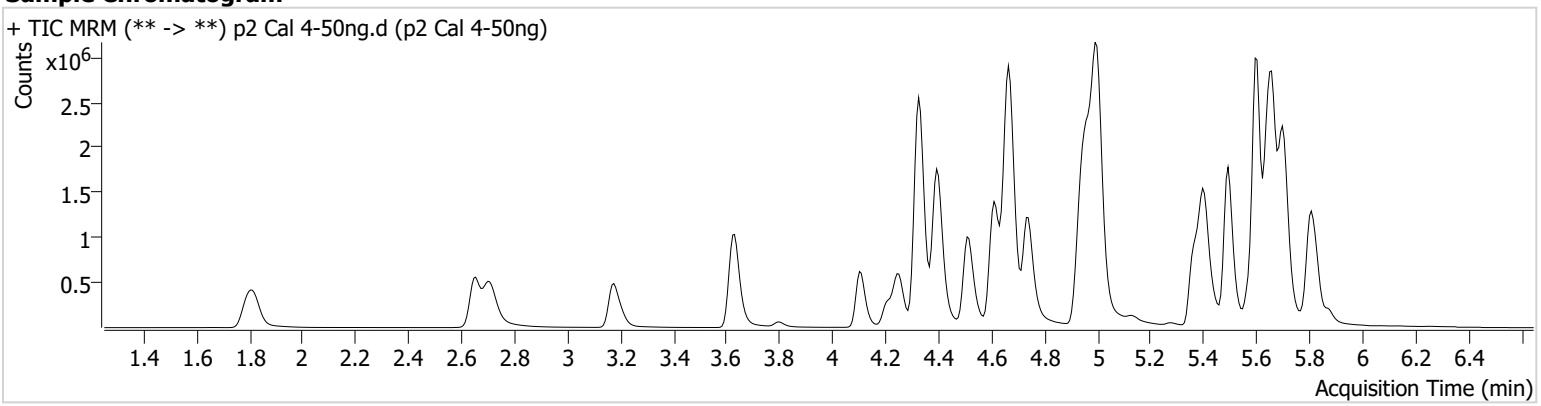
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Calibration Last Update 7/27/2023 8:29:47 AM

Instrument	Falco (069901)	**Data File**	p2 Cal 4-50ng.d
Type	Cal	**Sample**	p2 Cal 4-50ng
Acq. Method	AM 28 MDQ P2 Updated 081022 CS.m	**Operator**	Celena Shrum
Sample Position	P2-D5	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	5		
Acq. Date-Time	7/23/2023 4:55:14 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
10-OH-Carbazepine	5.001	1594549	443.75	91.8	4468.10	1436782	48.3003 ng/ml
9-Hydroxyrisperidone	4.670	81183	44097.18	3659.9	2030.95	2633689	46.1418 ng/ml
Amitriptyline	5.694	386180	1672.82	93.6	11913.04	299807	49.1140 ng/ml
Flurazepam	5.362	1726960	3444.24	11.9	102234.36	989605	47.7171 ng/ml
Maprotiline	5.667	159655	730.98	241.6	4644.15	299807	47.8311 ng/ml
Methocarbamol	4.410	256459	3434.33	101.1	636.70	352167	50.0289 ng/ml
Norketamine	4.106	1302861	75266.48	25.3	3756.07	2812606	53.6013 ng/ml
Nortriptyline	5.716	291414	5221.01	33.0	1070.07	175480	48.6374 ng/ml
Topiramate	4.977	42130	50380.79	38.4	13952.60	66550	49.1138 ng/ml

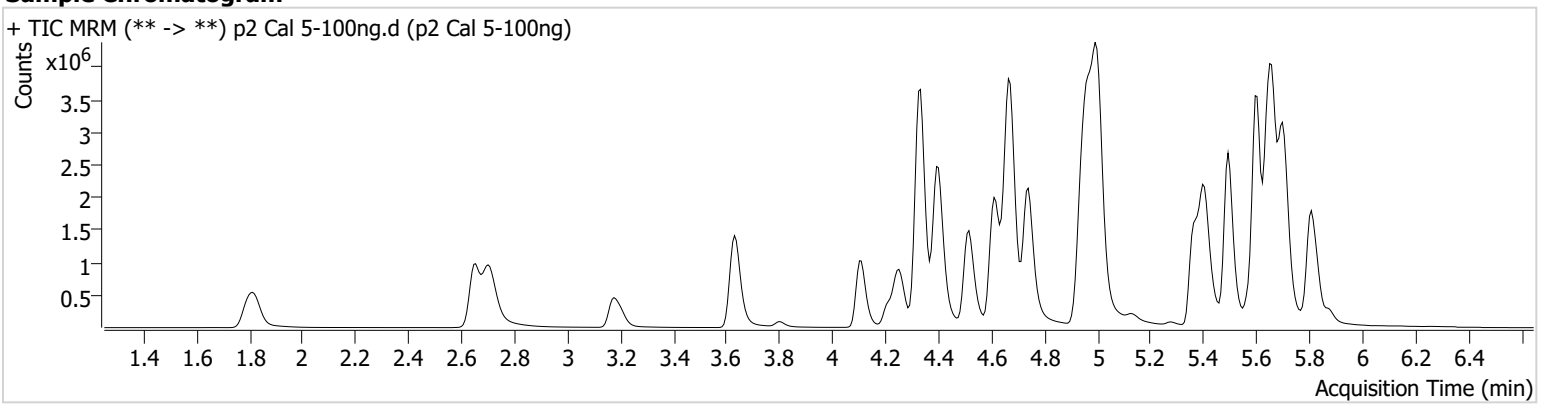
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Calibration Last Update 7/27/2023 8:29:47 AM

Instrument	Falco (069901)	**Data File**	p2 Cal 5-100ng.d
Type	Cal	**Sample**	p2 Cal 5-100ng
Acq. Method	AM 28 MDQ P2 Updated 081022 CS.m	**Operator**	Celena Shrum
Sample Position	P2-E5	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	5		
Acq. Date-Time	7/23/2023 5:05:58 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
10-OH-Carbazepine	5.001	2648102	1152.96	87.4	3413.43	1128655	101.2632 ng/ml
9-Hydroxyrisperidone	4.670	147693	104131.90	3753.0	9002.08	2318556	94.0488 ng/ml
Amitriptyline	5.694	720454	2158.43	93.7	2570.43	279708	97.9536 ng/ml
Flurazepam	5.362	3140223	17889.43	12.1	985.33	740113	114.4454 ng/ml
Maprotiline	5.667	279120	1774.82	257.2	2559.60	279708	90.4150 ng/ml
Methocarbamol	4.416	388184	3154.35	100.9	29420.67	274615	97.5729 ng/ml
Norketamine	4.106	2259468	77327.15	24.6	7556.84	2487633	105.7288 ng/ml
Nortriptyline	5.716	538752	5269.08	33.4	2292.31	164244	95.3712 ng/ml
Topiramate	4.977	63739	64142.94	37.1	22155.18	56676	87.1299 ng/ml

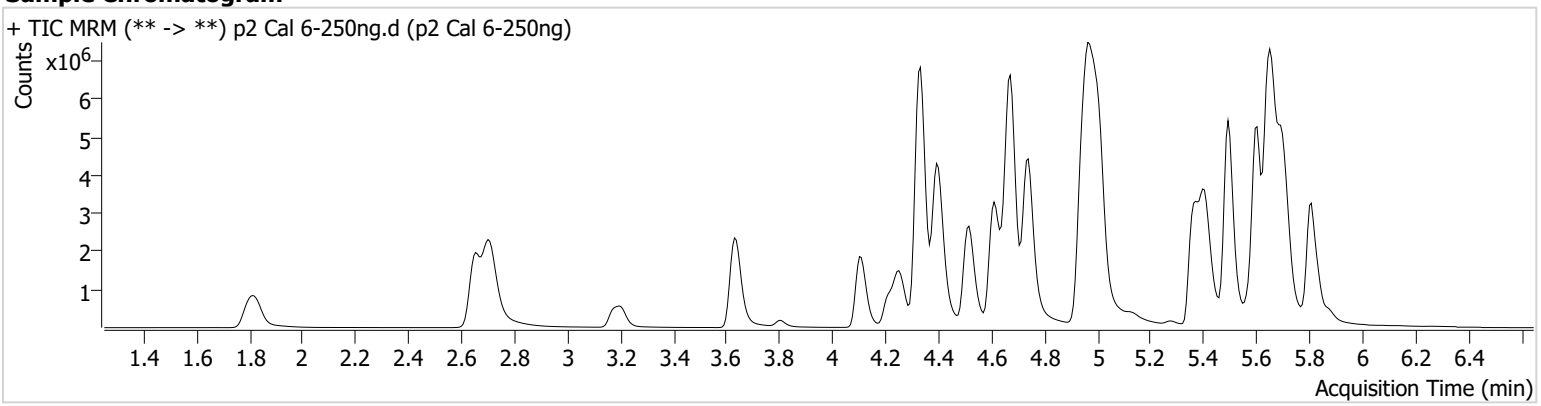
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Calibration Last Update 7/27/2023 8:29:47 AM

Instrument	Falco (069901)	**Data File**	p2 Cal 6-250ng.d
Type	Cal	**Sample**	p2 Cal 6-250ng
Acq. Method	AM 28 MDQ P2 Updated 081022 CS.m	**Operator**	Celena Shrum
Sample Position	P2-F5	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	5		
Acq. Date-Time	7/23/2023 5:16:42 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio		S/N	ISTD Resp.	Final Conc.
10-OH-Carbazepine	5.008	4422414	865.26	87.0		61620.85	757705	250.7721 ng/ml
9-Hydroxyrisperidone	4.670	323329	1242.41	3951.1		9753.11	1928013	245.5997 ng/ml
Amitriptyline	5.694	1744112	3504.52	92.7		1227.31	267357	247.6926 ng/ml
Flurazepam	5.362	6857564	26952.44	12.4		700324.80	397674	461.7724 ng/ml
Maprotiline	5.667	506496	3442.34	323.4	High	10862.27	267357	172.4554 ng/ml
Methocarbamol	4.423	564685	2762.74	100.9		27888.19	163982	238.4046 ng/ml
Norketamine	4.106	4456030	6540.52	25.0		6083.48	2168991	239.9713 ng/ml
Nortriptyline	5.716	1217106	133953.13	35.2		433421.82	151006	233.2987 ng/ml
Topiramate	4.977	78714	86599.99	38.6		32784.05	33359	182.6398 ng/ml

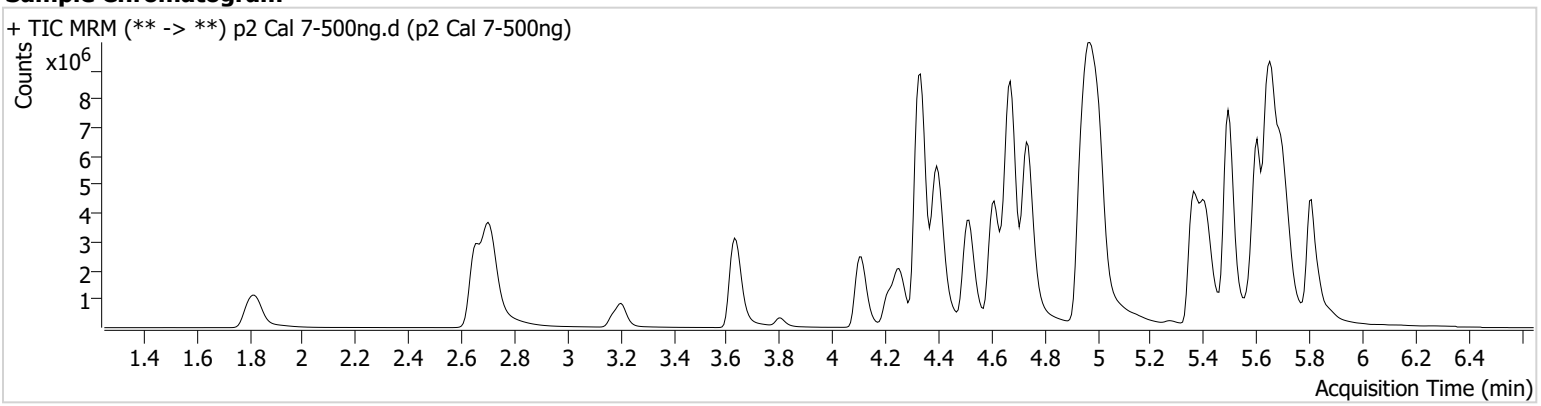
TS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin
Calibration Last Update 7/27/2023 8:29:47 AM

Instrument	Falco (069901)	**Data File**	p2 Cal 7-500ng.d
Type	Cal	**Sample**	p2 Cal 7-500ng
Acq. Method	AM 28 MDQ P2 Updated 081022 CS.m	**Operator**	Celena Shrum
Sample Position	P2-G5	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	5		
Acq. Date-Time	7/23/2023 5:28:31 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio		S/N	ISTD Resp.	Final Conc.
10-OH-Carbazepine	5.008	5996423	3286.95	89.7		5806.61	520568	494.1781 ng/ml
9-Hydroxyrisperidone	4.670	458827	95970.05	4000.7		102820.59	1369303	489.5091 ng/ml
Amitriptyline	5.694	2655280	19060.84	88.3		56788.51	203012	496.3548 ng/ml
Flurazepam	5.362	10355279	313849.32	11.9		5643.21	197327	1403.0359 ng/ml
Maprotiline	5.667	596645	14220.40	405.6	High	3980.03	203012	268.0336 ng/ml
Methocarbamol	4.423	669838	10790.90	101.0		19782.96	89795	517.0129 ng/ml
Norketamine	4.106	6461826	5030.85	24.8		6754.09	1630778	463.4455 ng/ml
Nortriptyline	5.716	1870071	495767.12	33.2		53682.44	111477	484.7925 ng/ml
Topiramate	4.977	93140	132.26	38.2		46658.99	18091	398.3253 ng/ml

TS CS

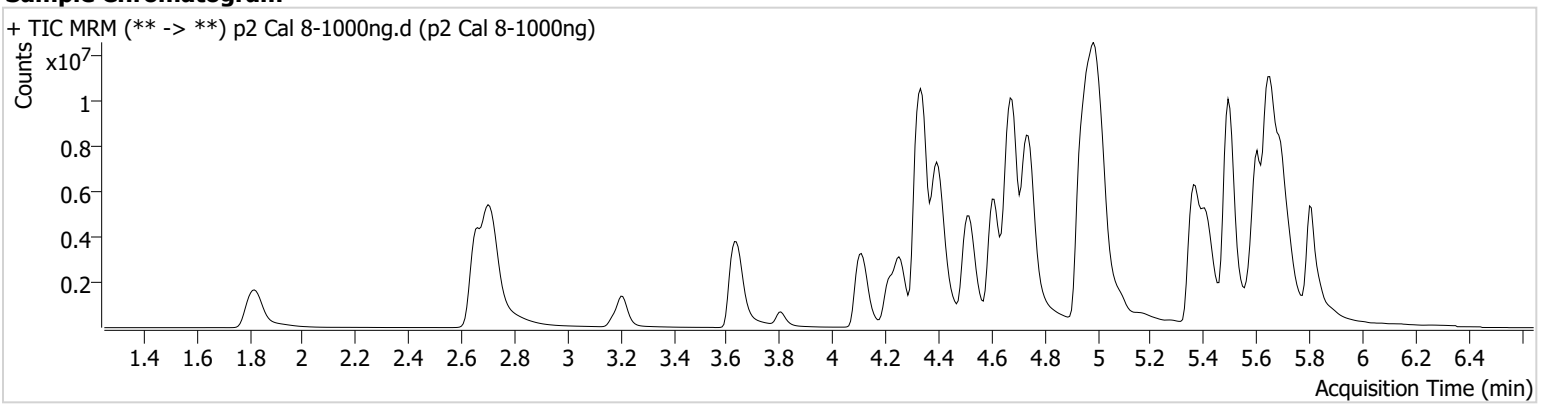
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2023\AM 27 28\072123 AM 27 28 CS TS\QuantResults\AM 28 P2 CS TS Case Evaluations.batch.bin

Calibration Last Update 7/27/2023 8:29:47 AM

Instrument	Falco (069901)	**Data File**	p2 Cal 8-1000ng.d
Type	Cal	**Sample**	p2 Cal 8-1000ng
Acq. Method	AM 28 MDQ P2 Updated 081022 CS.m	**Operator**	Celena Shrum
Sample Position	P2-H5	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values included in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	5		
Acq. Date-Time	7/23/2023 5:39:23 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio		S/N	ISTD Resp.	Final Conc.
10-OH-Carbazepine	5.008	8397390	3360.28	87.9		7907.64	357834	1005.9813 ng/ml
9-Hydroxyrisperidone	4.670	661274	2853.02	3720.2		2963.70	942082	1024.0868 ng/ml
Amitriptyline	5.694	3640768	4509.05	88.6		2192.31	136940	1008.6804 ng/ml
Flurazepam	5.355	14204180	2653.88	12.6		46082.89	98640	3848.0319 ng/ml
Maprotiline	5.667	491017	11848.05	641.5	High	3405.71	136940	327.2088 ng/ml
Methocarbamol	4.430	764052	49560.73	102.3		36527.49	39153	1353.3203 ng/ml
Norketamine	4.113	9565415	314306.13	24.4		5193.23	1272411	879.8415 ng/ml
Nortriptyline	5.722	2330823	73653.03	34.1		30369.90	64873	1037.5018 ng/ml
Topiramate	4.984	112934	22.99	38.9		27.71	8330	1048.7058 ng/ml