

**REVIEWED**  
By Tamara Salazar at 1:54 pm, Feb 17, 2022

SC

2/17/2022

**Worklist: 5615**

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>
P2022-0206	1	BCK	AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ



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# 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*

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>	<i>Expiration Date</i>
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.*

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

### 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.*

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

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**Idaho State Police  
Forensic Services**

**Request for Departure from an Analytical Method or Quality Standard**

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Deviation Number (assigned by QM): TOX-22-01

Date of Request: **2/3/2022**

Requestor/Discipline: Celena Shrum/Toxicology

Analytical Method/Quality Standard, Revision #: AM #25, AM #28, AM #29, Revision 13

Temporary or Permanent Deviation: Permanent

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**Scope of Deviation** (record specific information, e.g. affected programs, evidence types, expected end date; etc): Deviation will remain in place until the change is made in the next method revision.

**Deviation Request** (Describe detailed instructions of the changes being made; include reference to specific section number(s) in the method manual): 4.1.4 (Place plate on shaking incubator at approximately 900 rpm for approximately 15 minutes) of AM #25, AM # 28, and AM #29 is being removed. The removal of this step was tested in the validation "Addition of Compounds/Modifications for the MDS" (approved on 2/2/2022) and it was determined that that step is not necessary and can be removed.

**Technical Justification for Analytical Method Deviations:** Refer to validation "Addition of Compounds/Modifications for the MDS" (approved on 2/2/2022)

**Technical Review**

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Departure approved  
Comments:

Departure Not Approved  
Comments:

Approver: Rachel Cutler  
Title: Laboratory Manager



Date: 2/10/2022

**Quality Review**

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Quality Approver: Jason Crowe  
Title: Quality Manager  
Date: 2/10/2022



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

Extraction Date: 02/17/2022 Analyst: Sarah Collins  
Plate lot#: IDP-122-2-210609 Plate Retest Date: 12/09/21  
Mobile phase A: 5mM Amm Form + 0.01% FA Mobile phase B: 0.01% Formic Acid in MeOH  
Blank Blood Lot: Lampire 22B52016-2 Blank Urine Lot: N/A  
Column: Agilent 120 EC-C18 (2.1x 100-2.7um) 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: Pipette 250 ul urine in blank well, add 40 ul BG Turbo, add 100 ul 500 mm sodium phosphate buffer, mix for at least 5 minutes at ambient temperature. Pipette 250µL blood (calibrated pipette) or 250µL hydrolyzed urine in wells of analytical (standards) plate. Pipette ID: #16
- 3. Pipette 250µL 0.5M ammonium hydroxide in wells of analytical plate.
- 4. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 5. Transfer 300µL of blood+base/urine+base mixture to corresponding wells of SLE+ plate.
- 6. 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)*
- 7. Wait 5 minutes.
- 8. Add 900uL ethyl acetate.
- 9. Wait 5 minutes.
- 10. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left).*
- 11. Add 900uL ethyl acetate.
- 12. Wait 5 minutes.
- 13. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left).*
- 14. Remove plate containing eluate. If run contains urine or at the analyst's discretion, add 50µL 1% HCl in MeOH to wells and place plate cover on plate before drying (optional). Place on SPE Dry and evaporate to dryness at approx. 35°C.
- 15. Reconstitute in 100µL 20% MeOH and heat seal plate with foil.

## Post-Analytic

- 1. Create batch and process data.
- 2. Make necessary changes to integration limits
- 3. Integration linear and R<sup>2</sup> 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: *Instrument stopped due to leak after calibrator 8 was injected. The leak was detected the morning of 2/17/22. The leak was fixed, and the remaining samples were ran 2/17/22 with no further stops in the run. Only Amitriptyline, Flurazepam, Maprotiline, and Methylphenidate were evaluated in this run. Curves limited: Flurazepam 1-100, Maprotiline 1-100, Methylphenidate 1-500*

# Analytical Plate Map

	1	2	3	4	5	6	7	8	9	10	11	12
A	IS + Cal. 1	IS + QC_1		IS + Cal. 1	IS + QC_1				IS + Cal. 8			IS + Cal. 8
B	IS + Cal. 2	IS + QC_2		IS + Cal. 2	IS + QC_2				IS + Cal. 7			IS + Cal. 7
C	IS + Cal. 3	IS + QC_3		IS + Cal. 3	IS + QC_3				IS + Cal. 6			IS + Cal. 6
D	IS + Cal. 4	IS + QC_4		IS + Cal. 4	IS + QC_4				IS + Cal. 5			IS + Cal. 5
E	IS + Cal. 5			IS + Cal. 5	negative blood			IS + QC_4	IS + Cal. 4		IS + QC_4	IS + Cal. 4
F	IS + Cal. 6			IS + Cal. 6	external blood			IS + QC_3	IS + Cal. 3		IS + QC_3	IS + Cal. 3
G	IS + Cal. 7			IS + Cal. 7	p2022-0206-1			IS + QC_2	IS + Cal. 2		IS + QC_2	IS + Cal. 2
H	IS + Cal. 8			IS + Cal. 8				IS + QC_1	IS + Cal. 1		IS + QC_1	IS + Cal. 1

All wells to contain 60 µl of Trapping Solution

SLE Plate Map

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	1	2	3	4	5	6	7	8	9	10	11	12
A											IS + Cal. 1	IS + QC_1
B											IS + Cal. 2	IS + QC_2
C											IS + Cal. 3	IS + QC_3
D											IS + Cal. 4	IS + QC_4
E											IS + Cal. 5	negative blood
F											IS + Cal. 6	external blood
G											IS + Cal. 7	p2022-0206-1
H											IS + Cal. 8	

All wells to contain 60 µl of Trapping Solution

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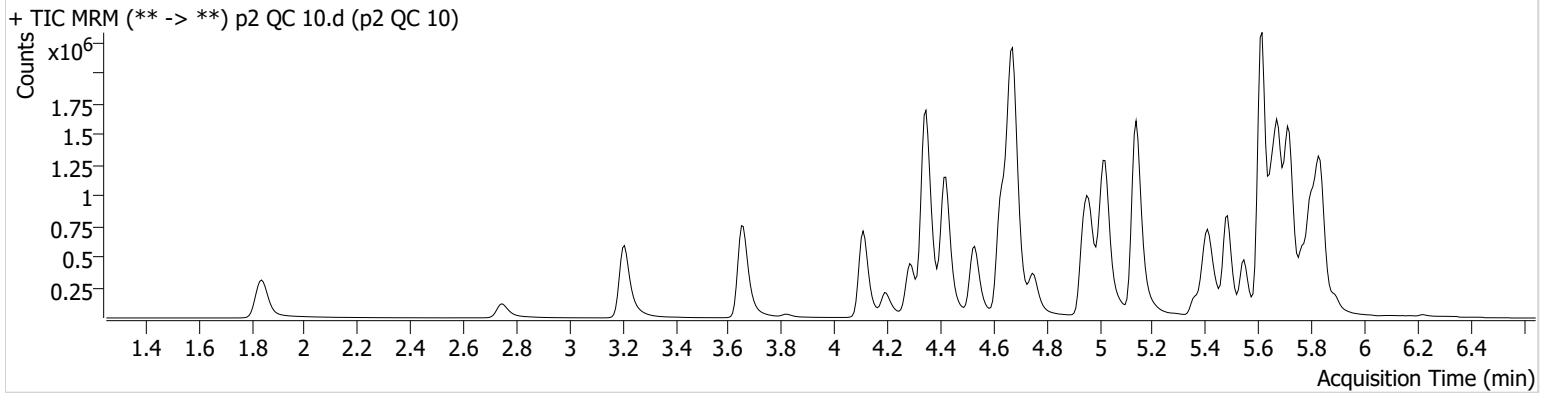


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2022\AM 27-28\021622 AM 28 P2 SC\QuantResults\AM 28 P2 casework.batch.bin  
**Calibration Last Update** 2/17/2022 10:32:46 AM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	p2 QC 10.d
<b>Type</b>	QC	<b>Sample</b>	p2 QC 10
<b>Acq. Method</b>	AM 28 MDQ P2 102521.m	<b>Operator</b>	Sarah Collins
<b>Sample Position</b>	P6-A12	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	2/17/2022 7:57:42 AM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amitriptyline	5.706	106410	785.72	97.8	1789.78	416274	10.1214 ng/ml
Flurazepam	5.358	341615	2403.85	12.0	3818.60	1278409	9.5910 ng/ml
Maprotiline	5.679	55252	249.11	221.0	1450.13	416274	11.3248 ng/ml
Methylphenidate	4.356	940253	1848.53	23.0	1254.16	3465844	9.7055 ng/ml

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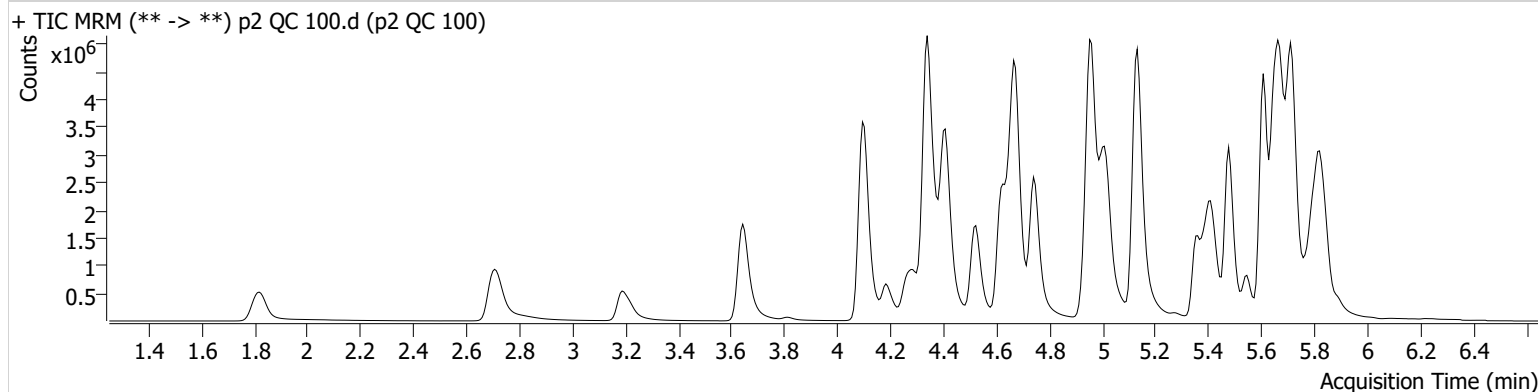


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2022\AM 27-28\021622 AM 28 P2 SC\QuantResults\AM 28 P2 casework.batch.bin  
**Calibration Last Update** 2/17/2022 10:32:46 AM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	p2 QC 100.d
<b>Type</b>	QC	<b>Sample</b>	p2 QC 100
<b>Acq. Method</b>	AM 28 MDQ P2 102521.m	<b>Operator</b>	Sarah Collins
<b>Sample Position</b>	P6-B12	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	2/17/2022 10:17:25 AM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amitriptyline	5.699	933249	2003.81	97.9	3444.00	382418	97.8964 ng/ml
Flurazepam	5.352	3272087	403.49	12.8	8136.19	664377	159.7828 ng/ml
Maprotiline	5.679	382069	6044.72	252.5	1594.41	382418	89.6164 ng/ml
Methylphenidate	4.342	8848695	10313.85	22.3	2829.01	3059582	104.3158 ng/ml



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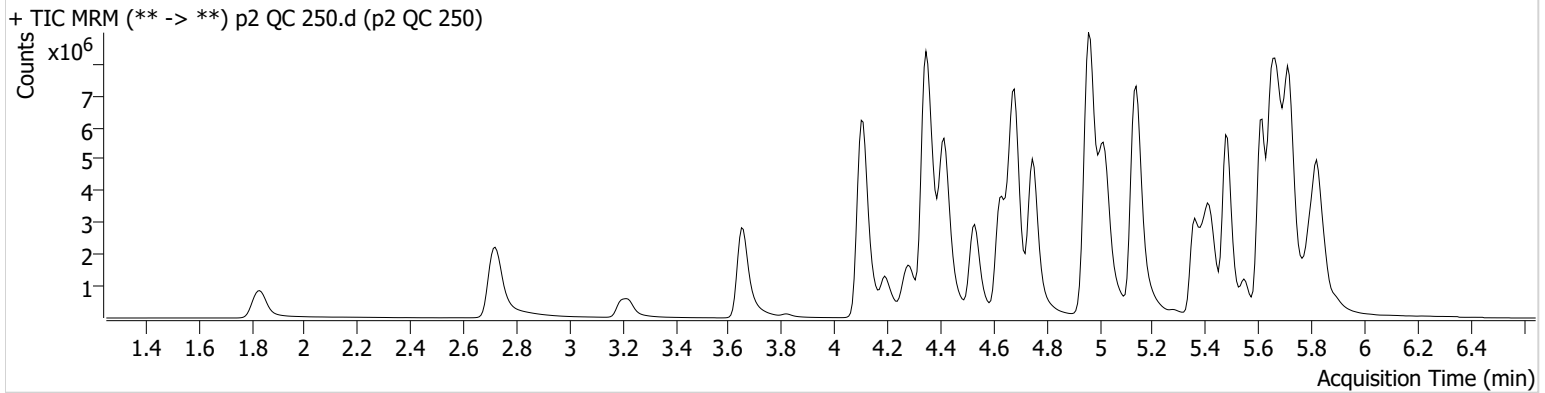


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2022\AM 27-28\021622 AM 28 P2 SC\QuantResults\AM 28 P2 casework.batch.bin  
**Calibration Last Update** 2/17/2022 10:32:46 AM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	p2 QC 250.d
<b>Type</b>	QC	<b>Sample</b>	p2 QC 250
<b>Acq. Method</b>	AM 28 MDQ P2 102521.m	<b>Operator</b>	Sarah Collins
<b>Sample Position</b>	P6-C12	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	2/17/2022 8:19:20 AM		

**Sample Chromatogram**



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amitriptyline	5.699	1794261	3716.35	93.5	5247.25	284679	253.0708 ng/ml
* Flurazepam	5.358	6853104	3903.88	13.0	4250.95	355047	623.3675 ng/ml
* Maprotiline	5.679	550965	681.08	316.1	2193.46	284679	174.2294 ng/ml
Methylphenidate	4.349	16672863	11598.13	23.2	1620.74	2468030	243.7822 ng/ml

\*OCR

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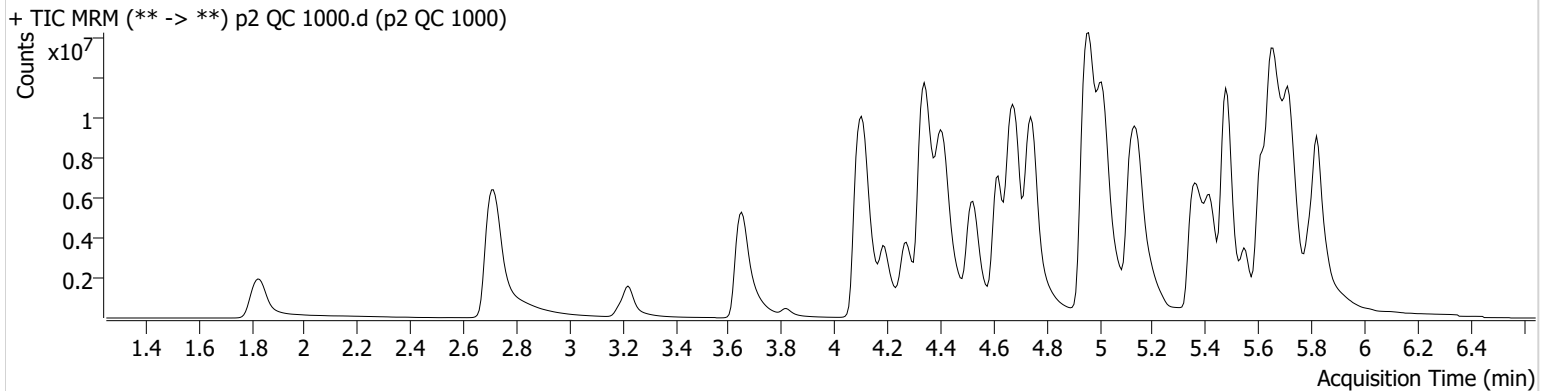


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2022\AM 27-28\021622 AM 28 P2 SC\QuantResults\AM 28 P2 casework.batch.bin  
**Calibration Last Update** 2/17/2022 10:32:46 AM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	p2 QC 1000.d
<b>Type</b>	QC	<b>Sample</b>	p2 QC 1000
<b>Acq. Method</b>	AM 28 MDQ P2 102521.m	<b>Operator</b>	Sarah Collins
<b>Sample Position</b>	P6-D12	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	2/17/2022 8:40:50 AM		

**Sample Chromatogram**



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amitriptyline	5.699	3600185	6516.87	92.8	80880.93	141978	1018.6046 ng/ml
* Flurazepam	5.352	16574569	3313.37	13.1	111456.86	53783	9938.0469 ng/ml
* Maprotiline	5.679	548758	2291.66	596.9 <b>High</b>	1715.97	141978	348.6131 ng/ml
* Methylphenidate	4.341	25133471	1069.53	30.8 <b>High</b>	614.81	1374372	660.0689 ng/ml

\*OCR

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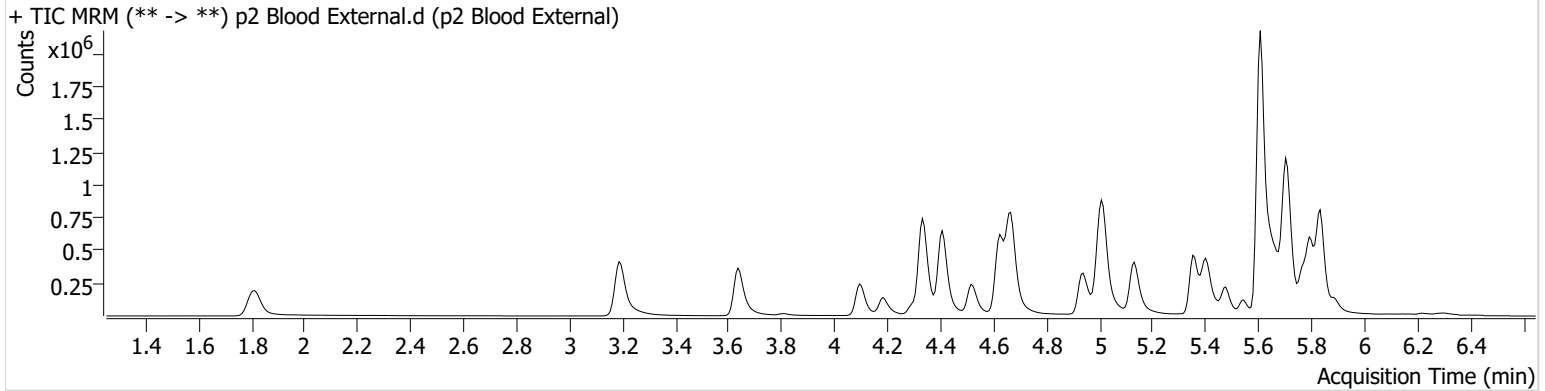


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2022\AM 27-28\021622 AM 28 P2 SC\QuantResults\AM 28 P2 casework.batch.bin  
**Calibration Last Update** 2/17/2022 10:32:46 AM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	p2 Blood External.d
<b>Type</b>	Sample	<b>Sample</b>	p2 Blood External
<b>Acq. Method</b>	AM 28 MDQ P2 102521.m	<b>Operator</b>	Sarah Collins
<b>Sample Position</b>	P6-F12	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	2/17/2022 9:34:28 AM		

**Sample Chromatogram**



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amitriptyline	5.699	267724	4854.02	87.8	292.14	128491	83.5623 ng/ml
Flurazepam	5.352	1020771	11037.32	12.4	106620.20	1506431	22.8240 ng/ml

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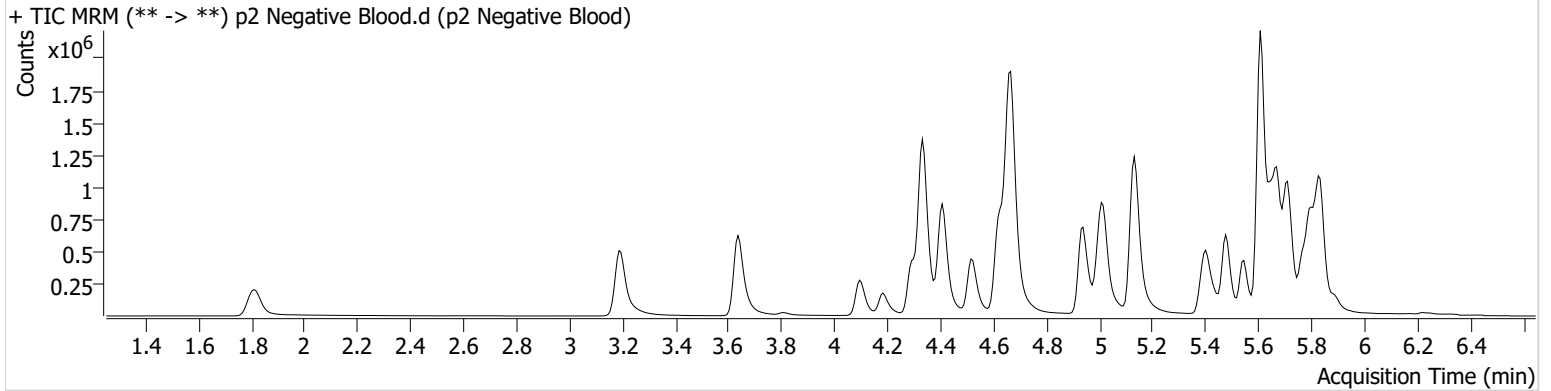


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2022\AM 27-28\021622 AM 28 P2 SC\QuantResults\AM 28 P2 casework.batch.bin  
**Calibration Last Update** 2/17/2022 10:32:46 AM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	p2 Negative Blood.d
<b>Type</b>	Sample	<b>Sample</b>	p2 Negative Blood
<b>Acq. Method</b>	AM 28 MDQ P2 102521.m	<b>Operator</b>	Sarah Collins
<b>Sample Position</b>	P6-E12	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	2/17/2022 9:13:00 AM		
<b>Sample Info.</b>			

## Sample Chromatogram



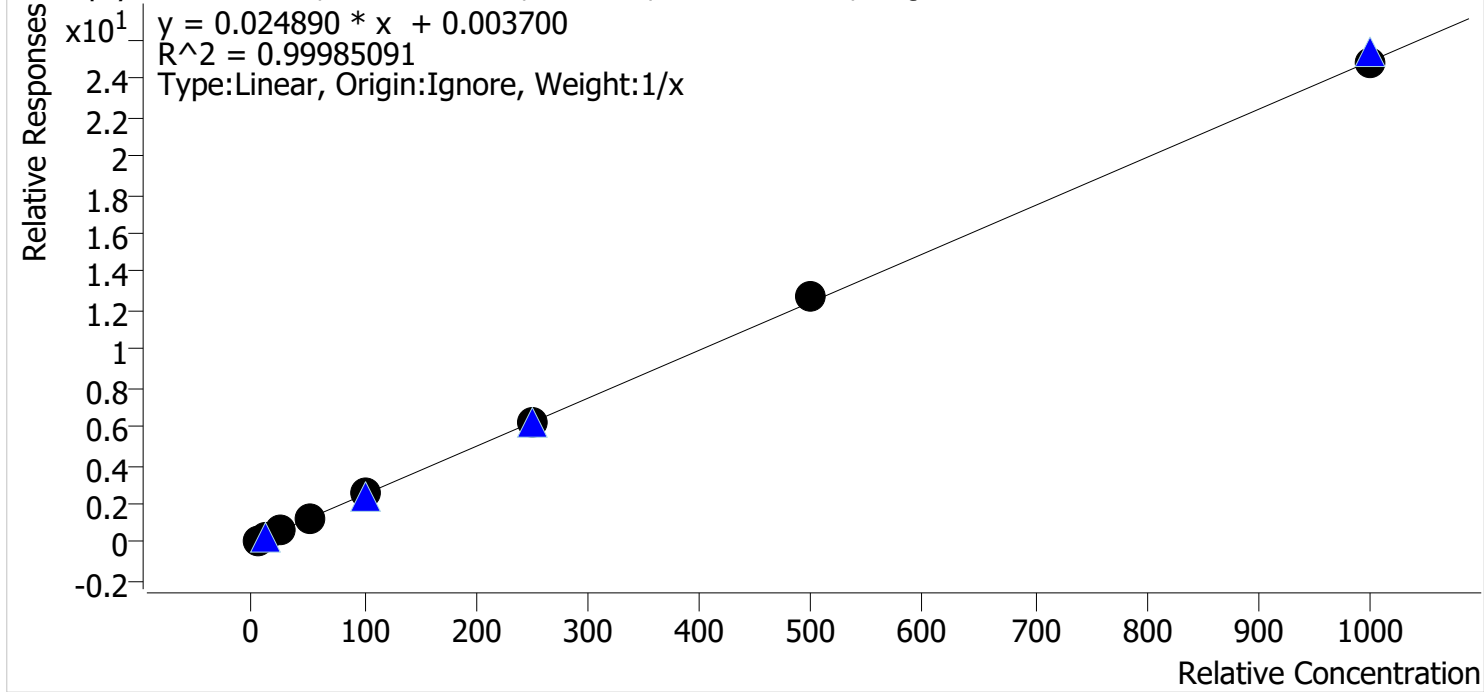
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# AM #28 Multi-Drug Quant. Calibration Curve Report

**Batch results** D:\MassHunter\Data\2022\AM 27-28\021622 AM 28 P2 SC\QuantResults\AM 28 P2 casework.batch.bin  
**Last Cal. Update** 2/17/2022 10:32 AM  
**Analyst Name** ISP\Datastor  
**Analyte** Amitriptyline **Internal Standard** Amitriptyline-D3

Amitriptyline - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 4 QCs



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✓	5.0	4.9	97.2
p2 Cal 2-10ng	2	✓	10.0	10.5	104.8
p2 Cal 3 -25ng	3	✓	25.0	24.5	97.9
p2 Cal 4-50ng	4	✓	50.0	49.6	99.2
p2 Cal 5-100ng	5	✓	100.0	101.1	101.1
p2 Cal 6-250ng	6	✓	250.0	246.4	98.6
p2 Cal 7-500ng	7	✓	500.0	508.1	101.6
p2 Cal 8-1000ng	8	✓	1000.0	994.8	99.5

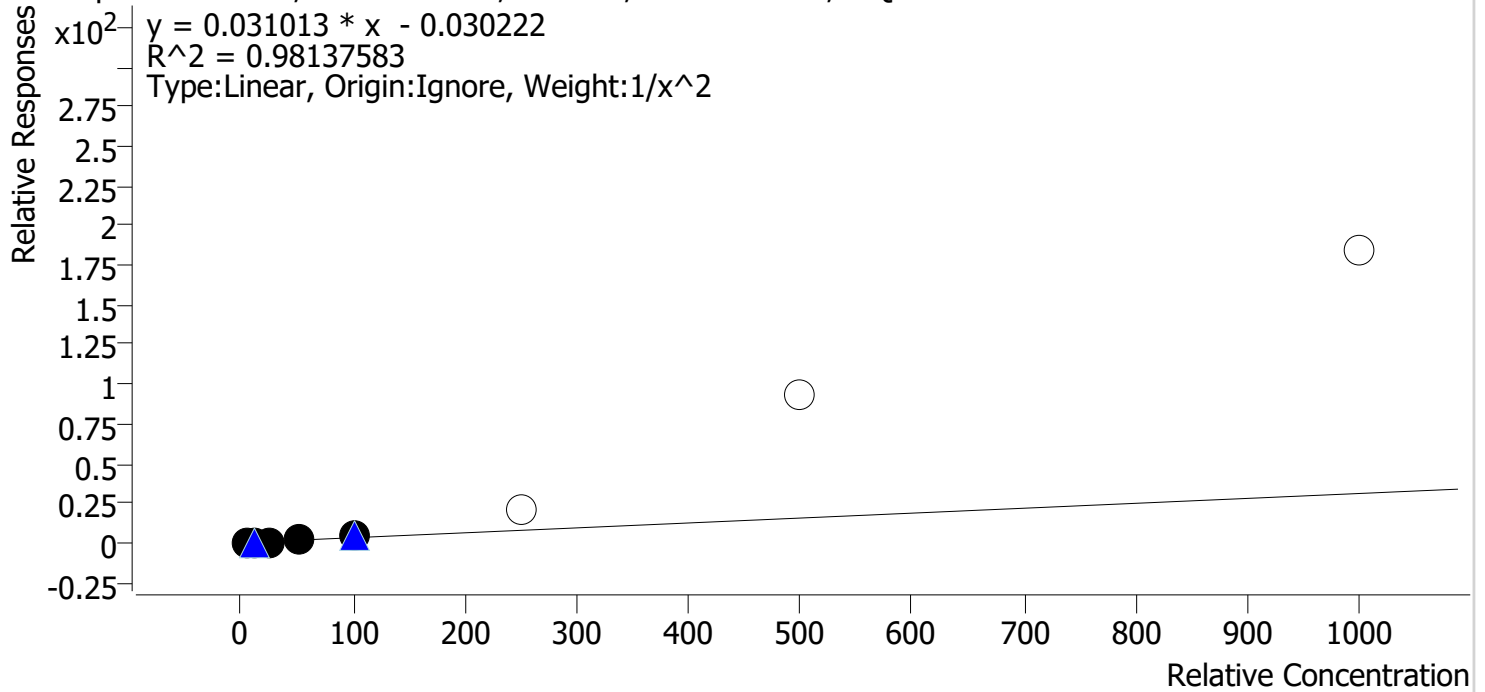
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# AM #28 Multi-Drug Quant. Calibration Curve Report

**Batch results** D:\MassHunter\Data\2022\AM 27-28\021622 AM 28 P2 SC\QuantResults\AM 28 P2 casework.batch.bin  
**Last Cal. Update** 2/17/2022 10:32 AM  
**Analyst Name** ISP\Datastor  
**Analyte** Flurazepam **Internal Standard** Estazolam-D5

Flurazepam - 8 Levels, 5 Levels Used, 8 Points, 5 Points Used, 4 QCs



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✓	5.0	5.4	108.1
p2 Cal 2-10ng	2	✓	10.0	8.4	84.2
p2 Cal 3 -25ng	3	✓	25.0	23.5	93.8
p2 Cal 4-50ng	4	✓	50.0	53.1	106.1
p2 Cal 5-100ng	5	✓	100.0	107.7	107.7
p2 Cal 6-250ng	6	✗	250.0	696.4	278.5
p2 Cal 7-500ng	7	✗	500.0	3009.1	601.8
p2 Cal 8-1000ng	8	✗	1000.0	5922.5	592.2

Calibrators 6-8 dropped due to accuracy

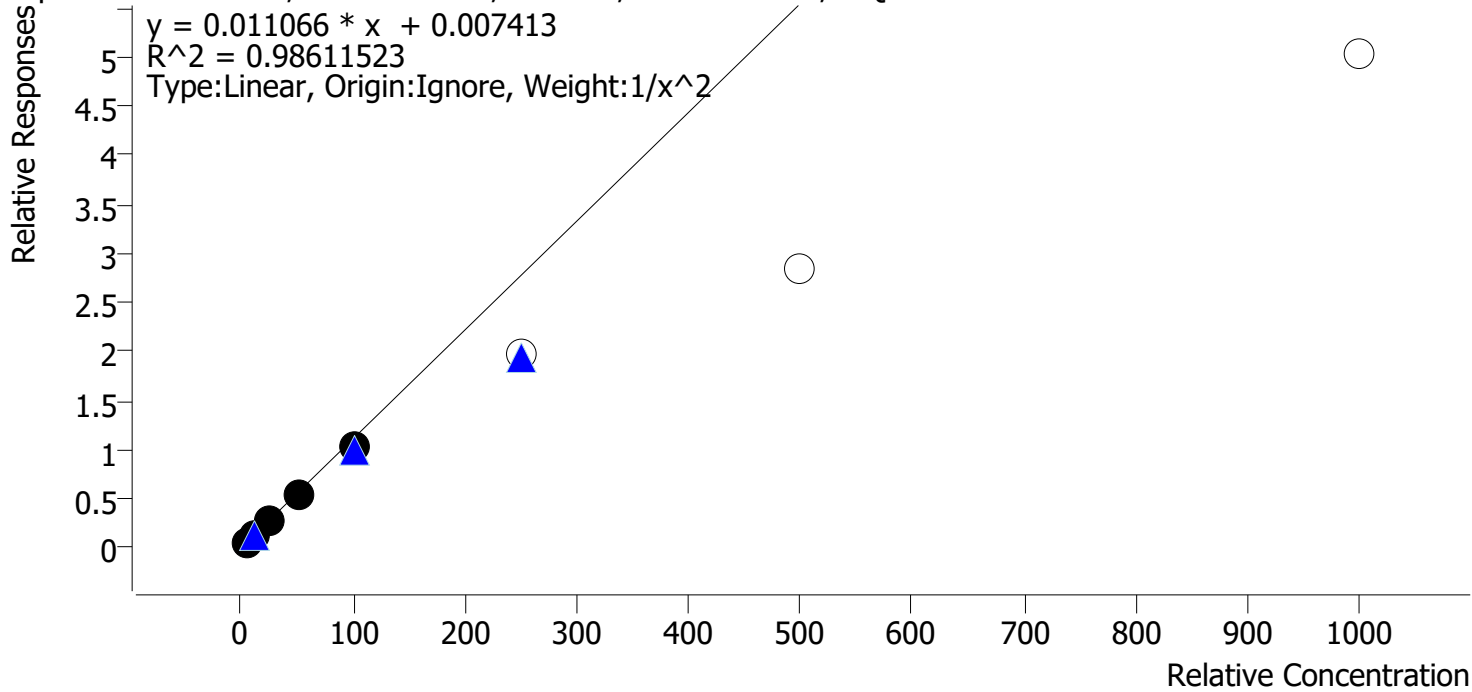
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# AM #28 Multi-Drug Quant. Calibration Curve Report

**Batch results** D:\MassHunter\Data\2022\AM 27-28\021622 AM 28 P2 SC\QuantResults\AM 28 P2 casework.batch.bin  
**Last Cal. Update** 2/17/2022 10:32 AM  
**Analyst Name** ISP\Datator  
**Analyte** Maprotiline **Internal Standard** Amitriptyline-D3

Maprotiline - 8 Levels, 5 Levels Used, 8 Points, 5 Points Used, 4 QCs



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✓	5.0	4.6	92.8
p2 Cal 2-10ng	2	✓	10.0	11.4	114.5
p2 Cal 3 -25ng	3	✓	25.0	25.6	102.5
p2 Cal 4-50ng	4	✓	50.0	49.0	98.1
p2 Cal 5-100ng	5	✓	100.0	92.1	92.1
p2 Cal 6-250ng	6	✗	250.0	176.7	70.7
p2 Cal 7-500ng	7	✗	500.0	256.5	51.3
p2 Cal 8-1000ng	8	✗	1000.0	453.4	45.3

Calibrators 6-8 dropped due to accuracy

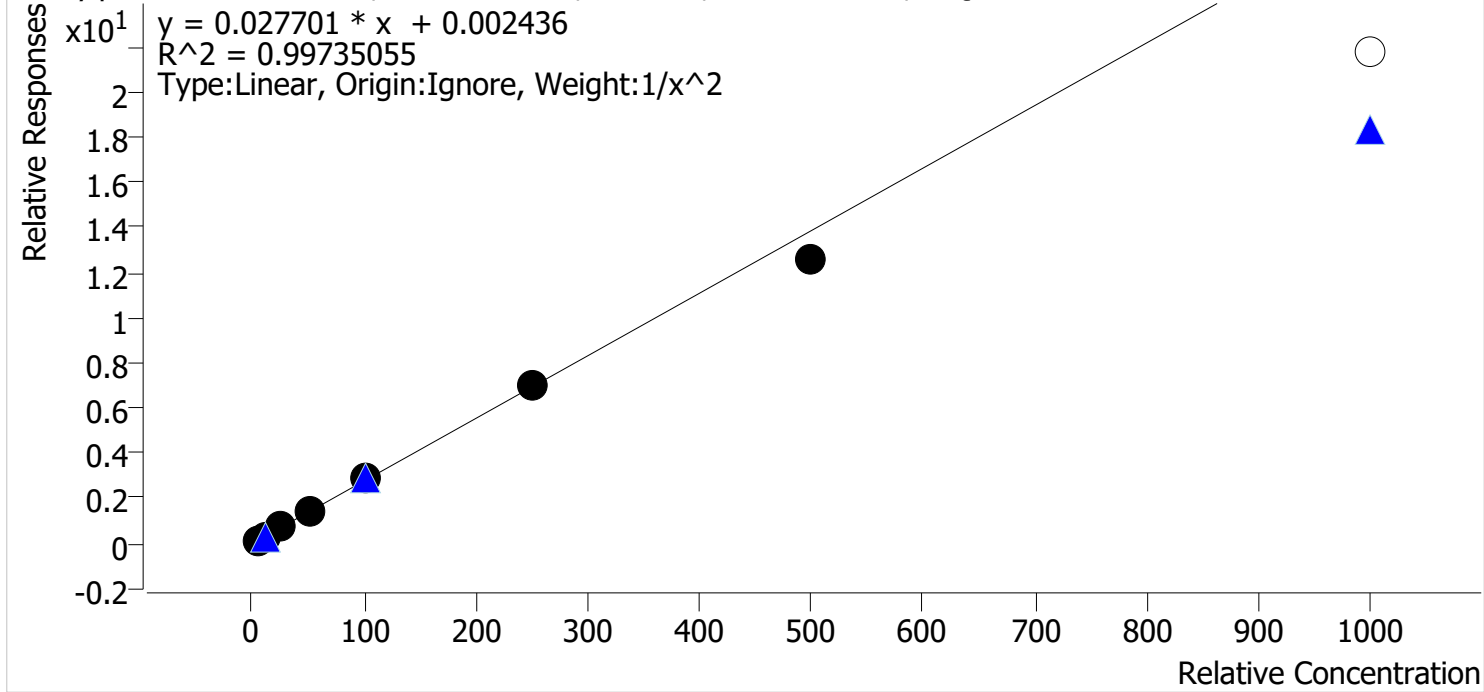
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# AM #28 Multi-Drug Quant. Calibration Curve Report

**Batch results** D:\MassHunter\Data\2022\AM 27-28\021622 AM 28 P2 SC\QuantResults\AM 28 P2 casework.batch.bin  
**Last Cal. Update** 2/17/2022 10:32 AM  
**Analyst Name** ISP\Datastor  
**Analyte** Methylphenidate **Internal Standard** Methylphenidate-D4

Methylphenidate - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 4 QCs



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✓	5.0	4.9	98.5
p2 Cal 2-10ng	2	✓	10.0	10.2	101.6
p2 Cal 3 -25ng	3	✓	25.0	25.3	101.1
p2 Cal 4-50ng	4	✓	50.0	51.3	102.7
p2 Cal 5-100ng	5	✓	100.0	104.7	104.7
p2 Cal 6-250ng	6	✓	250.0	250.7	100.3
p2 Cal 7-500ng	7	✓	500.0	455.6	91.1
p2 Cal 8-1000ng	8	x	1000.0	785.1	78.5

Calibrator 8 dropped due to QC 1000 ratio



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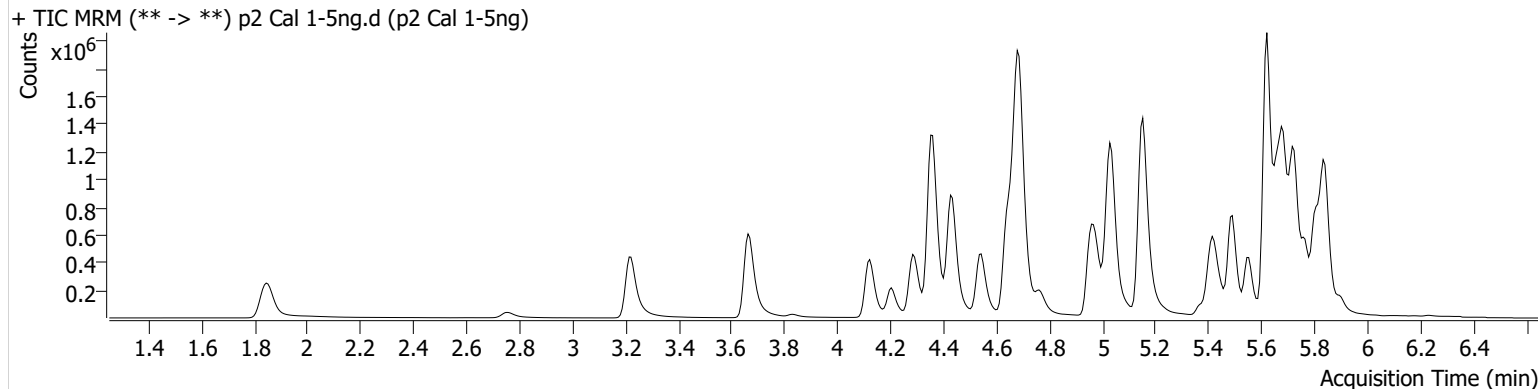


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2022\AM 27-28\021622 AM 28 P2 SC\QuantResults\AM 28 P2 casework.batch.bin  
**Calibration Last Update** 2/17/2022 10:32:46 AM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	p2 Cal 1-5ng.d
<b>Type</b>	Cal	<b>Sample</b>	p2 Cal 1-5ng
<b>Acq. Method</b>	AM 28 MDQ P2 102521.m	<b>Operator</b>	Sarah Collins
<b>Sample Position</b>	P6-A11	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	2/16/2022 4:45:38 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amitriptyline	5.713	52173	394.41	100.7	617.89	418489	4.8601 ng/ml
Flurazepam	5.365	173646	4662.65	12.3	275.89	1263372	5.4065 ng/ml
Maprotiline	5.685	24599	168.05	232.0	361.60	418489	4.6420 ng/ml
Methylphenidate	4.370	424291	4762.86	23.2	1669.80	3053886	4.9275 ng/ml

SC

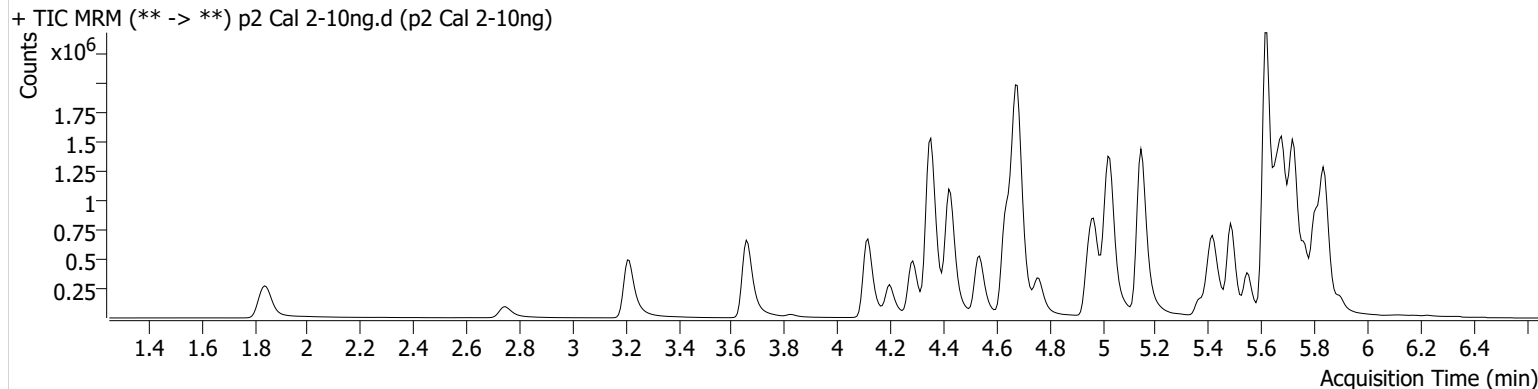


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**Batch results** D:\MassHunter\Data\2022\AM 27-28\021622 AM 28 P2 SC\QuantResults\AM 28 P2 casework.batch.bin  
**Calibration Last Update** 2/17/2022 10:32:46 AM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	p2 Cal 2-10ng.d
<b>Type</b>	Cal	<b>Sample</b>	p2 Cal 2-10ng
<b>Acq. Method</b>	AM 28 MDQ P2 102521.m	<b>Operator</b>	Sarah Collins
<b>Sample Position</b>	P6-B11	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	2/16/2022 4:56:31 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amitriptyline	5.713	97968	683.02	100.7	955.66	370183	10.4838 ng/ml
Flurazepam	5.365	311607	123168.79	12.2	460.68	1349213	8.4216 ng/ml
Maprotiline	5.685	49646	490.15	220.5	517.48	370183	11.4496 ng/ml
Methylphenidate	4.363	874272	2184.55	23.2	1679.77	3079340	10.1612 ng/ml

SC

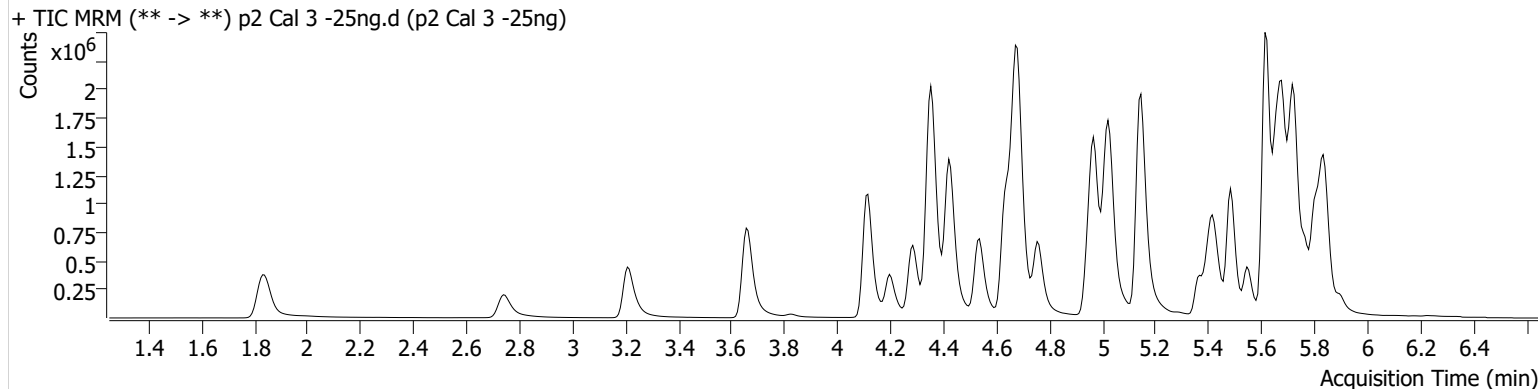


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2022\AM 27-28\021622 AM 28 P2 SC\QuantResults\AM 28 P2 casework.batch.bin  
**Calibration Last Update** 2/17/2022 10:32:46 AM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	p2 Cal 3 -25ng.d
<b>Type</b>	Cal	<b>Sample</b>	p2 Cal 3 -25ng
<b>Acq. Method</b>	AM 28 MDQ P2 102521.m	<b>Operator</b>	Sarah Collins
<b>Sample Position</b>	P6-C11	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	2/16/2022 5:07:15 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amitriptyline	5.706	221767	1084.64	99.9	877.25	361785	24.4784 ng/ml
Flurazepam	5.365	765218	358.63	12.5	84390.10	1097524	23.4565 ng/ml
Maprotiline	5.685	105269	499.36	223.7	4389.15	361785	25.6249 ng/ml
Methylphenidate	4.363	2014131	2266.98	23.1	2268.63	2865661	25.2845 ng/ml

SC

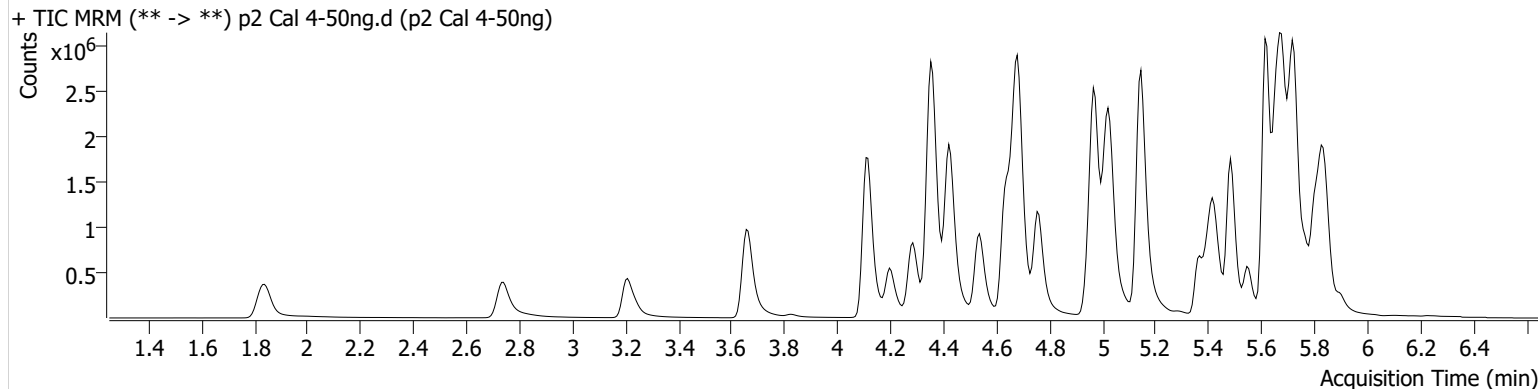


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2022\AM 27-28\021622 AM 28 P2 SC\QuantResults\AM 28 P2 casework.batch.bin  
**Calibration Last Update** 2/17/2022 10:32:46 AM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	p2 Cal 4-50ng.d
<b>Type</b>	Cal	<b>Sample</b>	p2 Cal 4-50ng
<b>Acq. Method</b>	AM 28 MDQ P2 102521.m	<b>Operator</b>	Sarah Collins
<b>Sample Position</b>	P6-D11	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	2/16/2022 5:17:59 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amitriptyline	5.706	460301	1205.04	98.7	1678.14	371698	49.6042 ng/ml
Flurazepam	5.365	1450639	808542.89	12.6	290.03	898094	53.0580 ng/ml
Maprotiline	5.685	204470	1244.23	233.5	4102.42	371698	49.0418 ng/ml
Methylphenidate	4.356	3786127	169491.14	22.9	2400.90	2657759	51.3375 ng/ml

SC

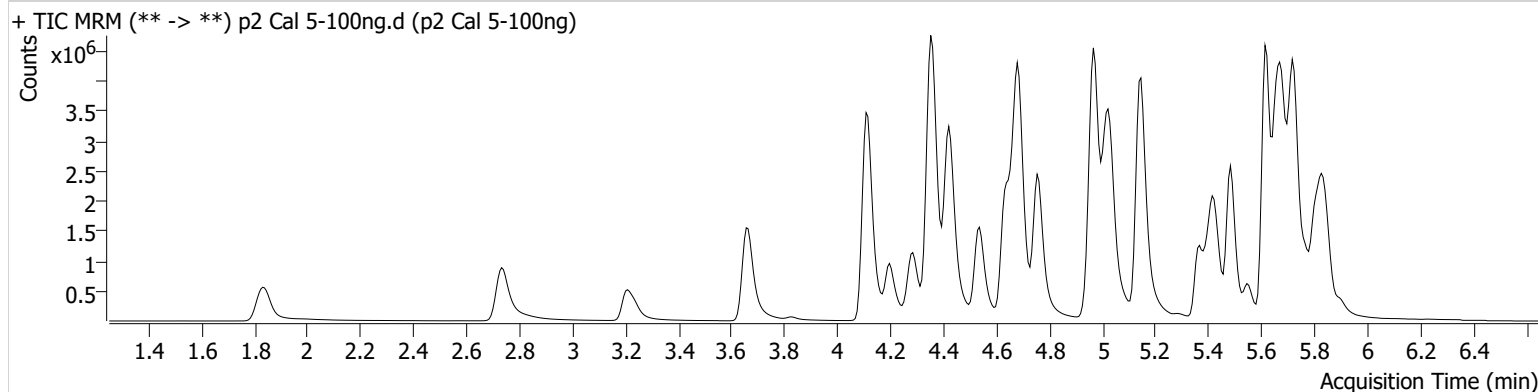


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2022\AM 27-28\021622 AM 28 P2 SC\QuantResults\AM 28 P2 casework.batch.bin  
**Calibration Last Update** 2/17/2022 10:32:46 AM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	p2 Cal 5-100ng.d
<b>Type</b>	Cal	<b>Sample</b>	p2 Cal 5-100ng
<b>Acq. Method</b>	AM 28 MDQ P2 102521.m	<b>Operator</b>	Sarah Collins
<b>Sample Position</b>	P6-E11	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	2/16/2022 5:28:43 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amitriptyline	5.706	688584	482.68	98.7	5392.34	273102	101.1488 ng/ml
Flurazepam	5.365	2723731	17334.06	12.9	2539.32	822828	107.7123 ng/ml
Maprotiline	5.685	280301	586.77	254.5	7211.23	273102	92.0812 ng/ml
Methylphenidate	4.356	7858229	326769.98	22.8	6713.86	2708339	104.6540 ng/ml

SC

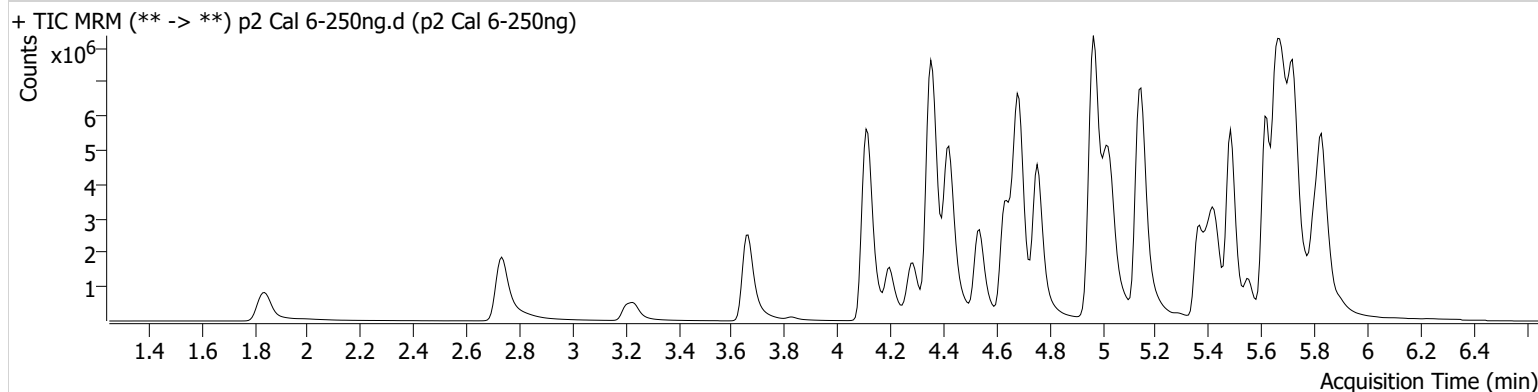


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2022\AM 27-28\021622 AM 28 P2 SC\QuantResults\AM 28 P2 casework.batch.bin  
**Calibration Last Update** 2/17/2022 10:32:46 AM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	p2 Cal 6-250ng.d
<b>Type</b>	Cal	<b>Sample</b>	p2 Cal 6-250ng
<b>Acq. Method</b>	AM 28 MDQ P2 102521.m	<b>Operator</b>	Sarah Collins
<b>Sample Position</b>	P6-F11	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	2/16/2022 5:39:26 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amitriptyline	5.706	1930873	3083.25	97.9	7195.26	314587	246.4434 ng/ml
Flurazepam	5.358	6288529	489.07	12.8	140368.45	291602	696.3543 ng/ml
Maprotiline	5.685	617420	695.61	310.6	4421.94	314587	176.6913 ng/ml
Methylphenidate	4.356	14490029	38856.59	22.6	5584.78	2086154	250.6510 ng/ml

SC

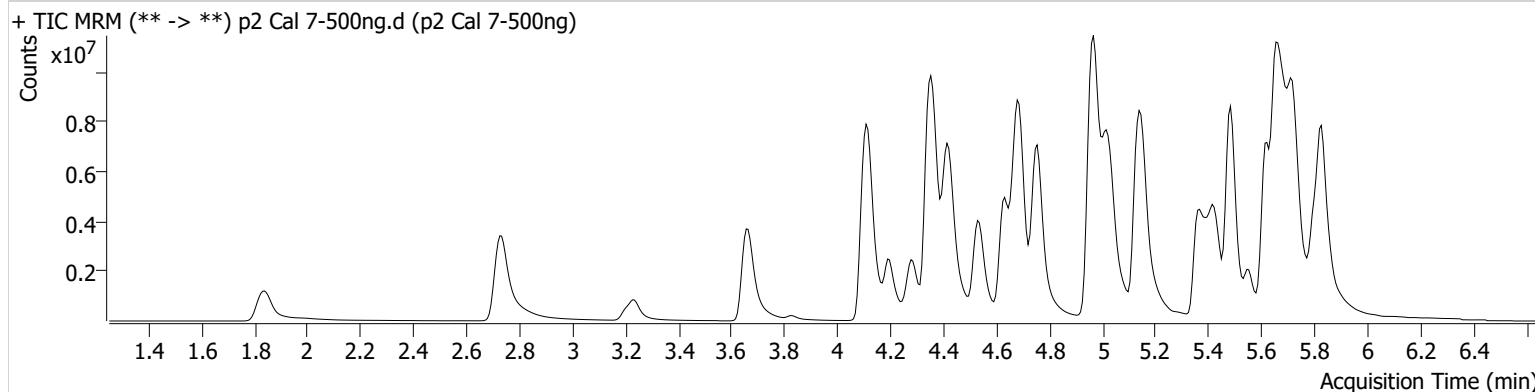


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2022\AM 27-28\021622 AM 28 P2 SC\QuantResults\AM 28 P2 casework.batch.bin  
**Calibration Last Update** 2/17/2022 10:32:46 AM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	p2 Cal 7-500ng.d
<b>Type</b>	Cal	<b>Sample</b>	p2 Cal 7-500ng
<b>Acq. Method</b>	AM 28 MDQ P2 102521.m	<b>Operator</b>	Sarah Collins
<b>Sample Position</b>	P6-G11	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	2/16/2022 5:50:10 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amitriptyline	5.706	3030734	3777.16	93.2	46360.40	239558	508.1327 ng/ml
Flurazepam	5.358	10554932	22308.05	12.7	1175.98	113141	3009.1290 ng/ml
Maprotiline	5.685	681716	2912.52	407.1 <b>High</b>	7232.49	239558	256.4955 ng/ml
Methylphenidate	4.349	20780627	117373.80	23.5	7485.38	1646394	455.5540 ng/ml

SC

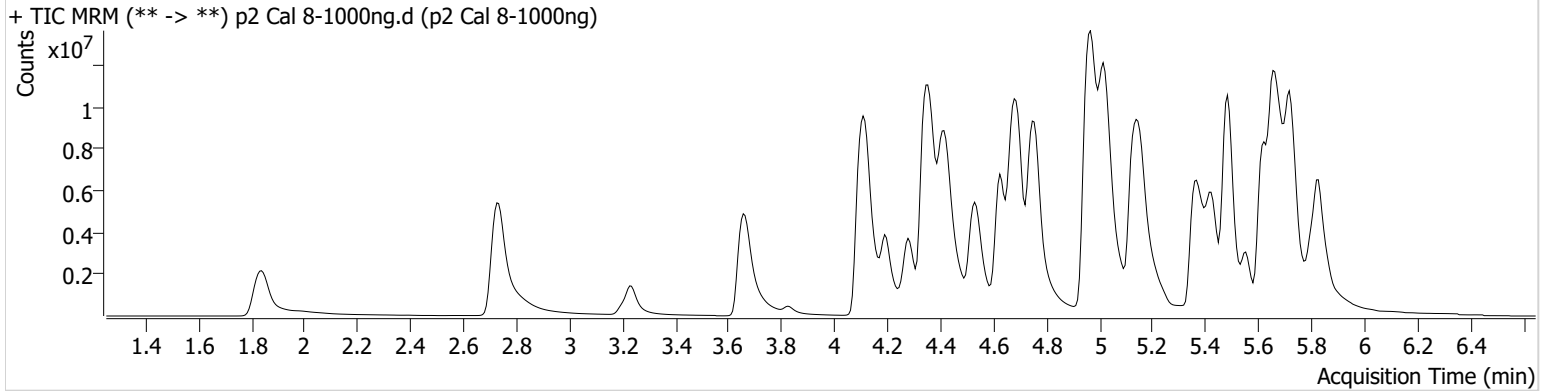


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2022\AM 27-28\021622 AM 28 P2 SC\QuantResults\AM 28 P2 casework.batch.bin  
**Calibration Last Update** 2/17/2022 10:32:46 AM

<b>Instrument</b>	Falco (069901)	<b>Data File</b>	p2 Cal 8-1000ng.d
<b>Type</b>	Cal	<b>Sample</b>	p2 Cal 8-1000ng
<b>Acq. Method</b>	AM 28 MDQ P2 102521.m	<b>Operator</b>	Sarah Collins
<b>Sample Position</b>	P6-H11	<b>Comment</b>	
<b>Injection Volume</b>	5		
<b>Acq. Date-Time</b>	2/16/2022 6:00:54 PM		

**Sample Chromatogram**



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amitriptyline	5.706	2452674	2637.52	94.1	2816.50	99034	994.8485 ng/ml
Flurazepam	5.358	16891065	229051.08	12.7	451.80	91979	5922.4916 ng/ml
Maprotiline	5.685	497646	788.13	453.4 <b>High</b>	4694.49	99034	453.4336 ng/ml
Methylphenidate	4.349	25385313	3608.47	25.4	201187.89	1167068	785.1210 ng/ml