

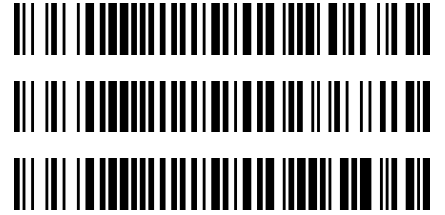
**REVIEWED**  
By Sarah Pickle at 4:04 pm, Sep 01, 2020

TS

9/1/2020

**Worklist: 4467**

| <u>LAB CASE</u> | <u>ITEM</u> | <u>ITEM TYPE</u> | <u>DESCRIPTION</u>                             |
|-----------------|-------------|------------------|--|
| P2020-2169      | 2           | BCK              | AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ |
| P2020-2437      | 1           | BCK              | AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ |
| P2020-2506      | 1           | BCK              | AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ |



TS

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

Extraction Date: 08/27/2020  
Plate lot#: Item #: IDP-112-2 Lot:200514

Analyst: Tamara Salazar  
Plate Expiration: 11/14/20

**Mobile phase A:** 5mM Amm Form + 0.01% FA  
0.5M Ammonium Hydroxide  
**Mobile phase B:** 0.01% Formic Acid in MeOH  
Ethyl Acetate 20% Methanol in Water  
**Blank Blood Lot:** 445283-4  
**LCMS-QQQ ID:** 069901  
**Column:** Agilent 120 EC-C18 (2.1x 100-2.7um)

### 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. Pipette **250µL blood (calibrated pipette) Pipette ID: 42** in wells of analytical (standards) plate.
- 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 4. Pipette **250µL 00.5M 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** 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. Reconstitute in **100µL 20% 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<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? Y / N \_\_\_\_\_ Add Control data to QC tracking spreadsheet.
- 6. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports.

COMMENTS: *Compounds evaluated: alpha-hydroxymidazolam 5-500, Amitriptyline 5-500, Carbamazepine 5-1000, Maprotiline 5-500, Midazolam 5-1000, Nortriptyline 10-1000*

*Original run (08-27-20) was interrupted due to a leak in the LC system. The source of the leak was fixed, and the run was restarted from the beginning (Calibrators and QCs were reinjected) on 08-28-2020. Only the reinjection data will be used.*

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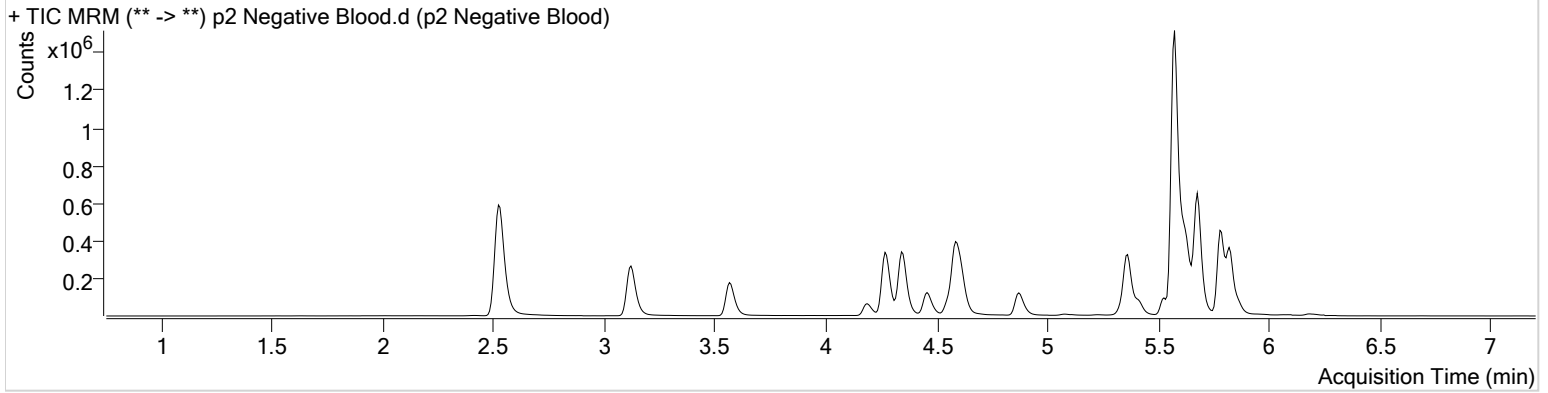


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2020\AM 27-28\082820 AM 28 P1 and P2 TS\QuantResults\AM 28 P2\_casework.batch.bin  
**Calibration Last Update** 8/31/2020 11:57:22 AM

|                         |                      |                  |                     |
|-------------------------|----------------------|------------------|---------------------|
| <b>Instrument</b>       | Falco                | <b>Data File</b> | p2 Negative Blood.d |
| <b>Type</b>             | Sample               | <b>Sample</b>    | p2 Negative Blood   |
| <b>Acq. Method</b>      | MDQ P2 061720.m      | <b>Operator</b>  | Tamara Salazar      |
| <b>Sample Position</b>  | P1-D5                | <b>Comment</b>   |                     |
| <b>Injection Volume</b> | 2                    |                  |                     |
| <b>Acq. Date-Time</b>   | 8/28/2020 5:40:59 PM |                  |                     |

## Sample Chromatogram



| Name          | RT    | Resp. | S/N    | Ratio | S/N   | ISTD Resp. | Final Conc.     |
|---------------|-------|-------|--------|-------|-------|------------|-----------------|
| Nortriptyline | 5.686 | 11534 | 282.57 | 28.6  | 69.45 | 113446     | 0.6635 ng/ml <5 |

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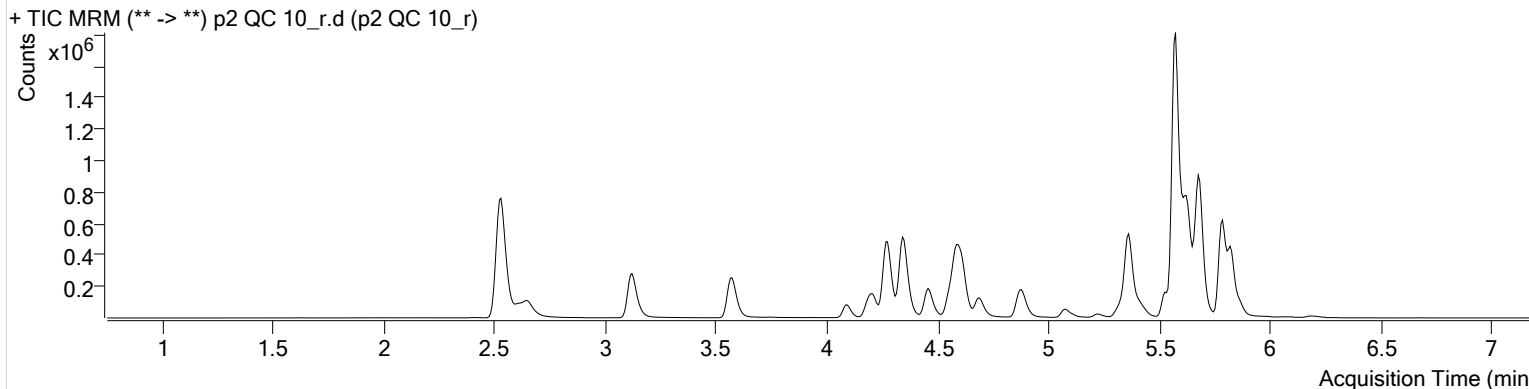


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2020\AM 27-28\082820 AM 28 P1 and P2 TS\QuantResults\AM 28 P2\_casework.batch.bin  
**Calibration Last Update** 8/31/2020 11:57:22 AM

|                         |                      |                  |                |
|-------------------------|----------------------|------------------|----------------|
| <b>Instrument</b>       | Falco                | <b>Data File</b> | p2 QC 10_r.d   |
| <b>Type</b>             | QC                   | <b>Sample</b>    | p2 QC 10_r     |
| <b>Acq. Method</b>      | MDQ P2 061720.m      | <b>Operator</b>  | Tamara Salazar |
| <b>Sample Position</b>  | P1-H5                | <b>Comment</b>   |                |
| <b>Injection Volume</b> | 2                    |                  |                |
| <b>Acq. Date-Time</b>   | 8/28/2020 4:05:32 PM |                  |                |

## Sample Chromatogram



| Name                   | RT    | Resp.  | S/N     | Ratio | S/N      | ISTD Resp. | Final Conc.   |
|------------------------|-------|--------|---------|-------|----------|------------|---------------|
| alpha-hydroxymidazolam | 5.784 | 113429 | 1100.14 | 62.4  | 548.53   | 446806     | 10.4706 ng/ml |
| Amitriptyline          | 5.658 | 97836  | 316.40  | 44.4  | 645.91   | 131634     | 9.0431 ng/ml  |
| Carbamazepine          | 5.577 | 605202 | 3670.75 | 7.8   | 2607.02  | 3526827    | 10.5240 ng/ml |
| Maprotiline            | 5.658 | 97836  | 316.40  | 32.9  | 604.01   | 131634     | 9.0431 ng/ml  |
| Midazolam              | 5.791 | 30337  | ∞       | 91.8  | 29579.76 | 313577     | 10.2675 ng/ml |
| Nortriptyline          | 5.686 | 51860  | ∞       | 27.9  | 2615.91  | 118741     | 11.1978 ng/ml |

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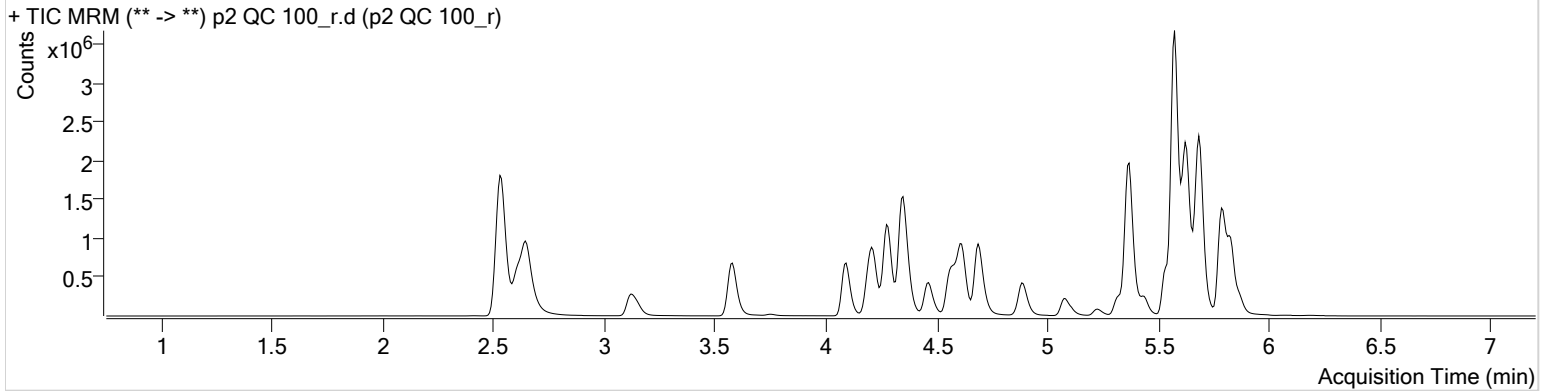


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2020\AM 27-28\082820 AM 28 P1 and P2 TS\QuantResults\AM 28 P2\_casework.batch.bin  
**Calibration Last Update** 8/31/2020 11:57:22 AM

|                         |                      |                  |                |
|-------------------------|----------------------|------------------|----------------|
| <b>Instrument</b>       | Falco                | <b>Data File</b> | p2 QC 100_r.d  |
| <b>Type</b>             | QC                   | <b>Sample</b>    | p2 QC 100_r    |
| <b>Acq. Method</b>      | MDQ P2 061720.m      | <b>Operator</b>  | Tamara Salazar |
| <b>Sample Position</b>  | P1-G5                | <b>Comment</b>   |                |
| <b>Injection Volume</b> | 2                    |                  |                |
| <b>Acq. Date-Time</b>   | 8/28/2020 4:26:52 PM |                  |                |

**Sample Chromatogram**



| Name                   | RT    | Resp.   | S/N     | Ratio | S/N      | ISTD Resp. | Final Conc.    |
|------------------------|-------|---------|---------|-------|----------|------------|----------------|
| alpha-hydroxymidazolam | 5.784 | 873450  | 4026.02 | 61.8  | 3307.44  | 373982     | 102.8381 ng/ml |
| Amitriptyline          | 5.658 | 314926  | 8421.02 | 44.1  | 591.06   | 49590      | 113.5960 ng/ml |
| Carbamazepine          | 5.577 | 5163755 | 5556.59 | 7.8   | 15431.20 | 3040758    | 102.7288 ng/ml |
| Maprotiline            | 5.658 | 314926  | 8421.02 | 31.5  | 1969.02  | 49590      | 113.5960 ng/ml |
| Midazolam              | 5.791 | 213035  | ∞       | 92.7  | 5397.66  | 235932     | 102.7132 ng/ml |
| Nortriptyline          | 5.686 | 143950  | ∞       | 29.2  | 68166.36 | 42384      | 104.2415 ng/ml |

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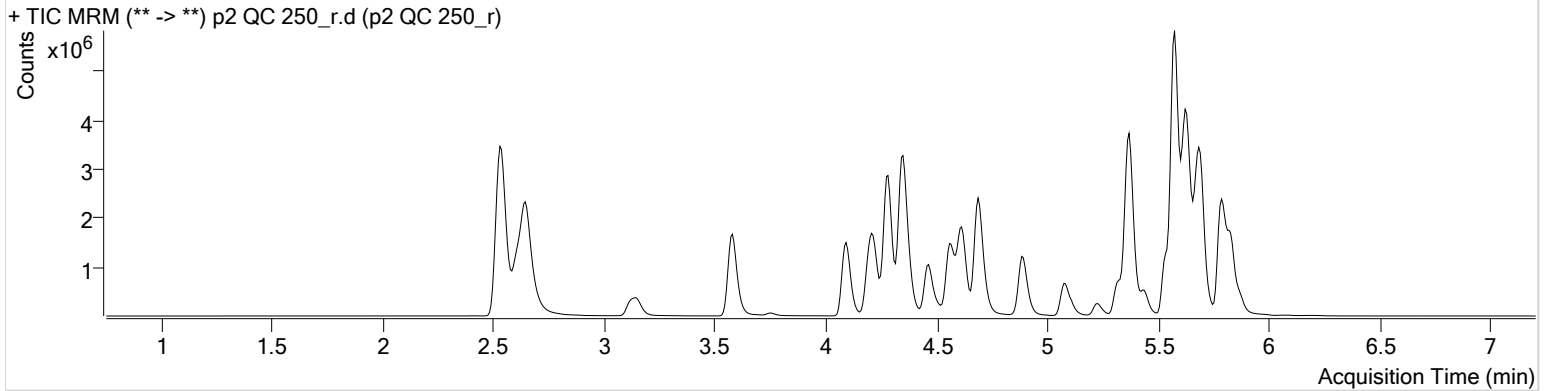


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2020\AM 27-28\082820 AM 28 P1 and P2 TS\QuantResults\AM 28 P2\_casework.batch.bin  
**Calibration Last Update** 8/31/2020 11:57:22 AM

|                         |                      |                  |                |
|-------------------------|----------------------|------------------|----------------|
| <b>Instrument</b>       | Falco                | <b>Data File</b> | p2 QC 250_r.d  |
| <b>Type</b>             | QC                   | <b>Sample</b>    | p2 QC 250_r    |
| <b>Acq. Method</b>      | MDQ P2 061720.m      | <b>Operator</b>  | Tamara Salazar |
| <b>Sample Position</b>  | P1-F5                | <b>Comment</b>   |                |
| <b>Injection Volume</b> | 2                    |                  |                |
| <b>Acq. Date-Time</b>   | 8/28/2020 4:48:02 PM |                  |                |

**Sample Chromatogram**



| Name                   | RT    | Resp.    | S/N       | Ratio | S/N     | ISTD Resp. | Final Conc.    |
|------------------------|-------|----------|-----------|-------|---------|------------|----------------|
| alpha-hydroxymidazolam | 5.777 | 1701727  | 10068.51  | 62.8  | ∞       | 324019     | 232.2435 ng/ml |
| Amitriptyline          | 5.657 | 852637   | 2360.06   | 45.7  | 1561.63 | 61131      | 255.2515 ng/ml |
| Carbamazepine          | 5.577 | 10637239 | 5671.12   | 8.1   | 7581.98 | 2385038    | 269.5407 ng/ml |
| Maprotiline            | 5.657 | 852637   | 2360.06   | 28.9  | 4540.15 | 61131      | 255.2515 ng/ml |
| Midazolam              | 5.791 | 473247   | 1190.22   | 91.2  | 2361.39 | 204887     | 264.0317 ng/ml |
| Nortriptyline          | 5.686 | 336557   | 498407.03 | 29.5  | 878.39  | 41286      | 253.7477 ng/ml |

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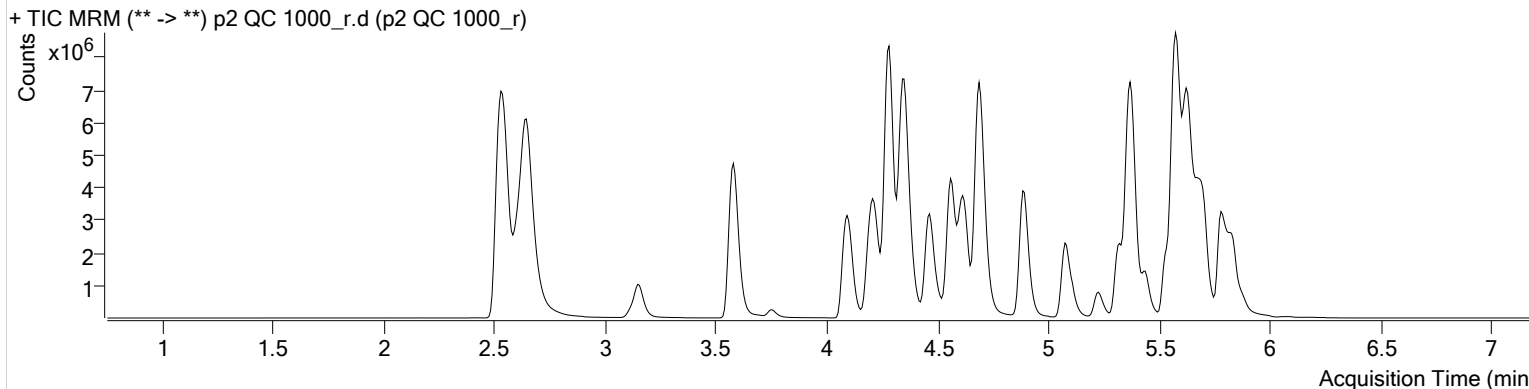


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2020\AM 27-28\082820 AM 28 P1 and P2 TS\QuantResults\AM 28 P2\_casework.batch.bin  
**Calibration Last Update** 8/31/2020 11:57:22 AM

|                         |                      |                  |                |
|-------------------------|----------------------|------------------|----------------|
| <b>Instrument</b>       | Falco                | <b>Data File</b> | p2 QC 1000_r.d |
| <b>Type</b>             | QC                   | <b>Sample</b>    | p2 QC 1000_r   |
| <b>Acq. Method</b>      | MDQ P2 061720.m      | <b>Operator</b>  | Tamara Salazar |
| <b>Sample Position</b>  | P1-E5                | <b>Comment</b>   |                |
| <b>Injection Volume</b> | 2                    |                  |                |
| <b>Acq. Date-Time</b>   | 8/28/2020 5:09:12 PM |                  |                |

**Sample Chromatogram**



| Name                                | RT    | Resp.    | S/N       | Ratio           | S/N       | ISTD Resp. | Final Conc.     |
|-------------------------------------|-------|----------|-----------|-----------------|-----------|------------|-----------------|
| * <del>alpha-hydroxymidazolam</del> | 5.770 | 2959133  | 2888.51   | 62.2            | ∞         | 181869     | 721.1620 ng/ml  |
| * <del>Amitriptyline</del>          | 5.658 | 1485995  | 32367.41  | 49.3            | 2170.41   | 29383      | 938.1692 ng/ml  |
| Carbamazepine                       | 5.577 | 20552246 | 129829.47 | 9.1             | 8550.87   | 1182981    | 1049.4971 ng/ml |
| * <del>Maprotiline</del>            | 5.658 | 1485995  | 32367.41  | 22.5 <b>Low</b> | 7670.51   | 29383      | 938.1692 ng/ml  |
| Midazolam                           | 5.791 | 1039399  | ∞         | 91.2            | 1769.92   | 123505     | 964.1930 ng/ml  |
| Nortriptyline                       | 5.686 | 407109   | ∞         | 30.2            | 217784.89 | 13236      | 964.4031 ng/ml  |

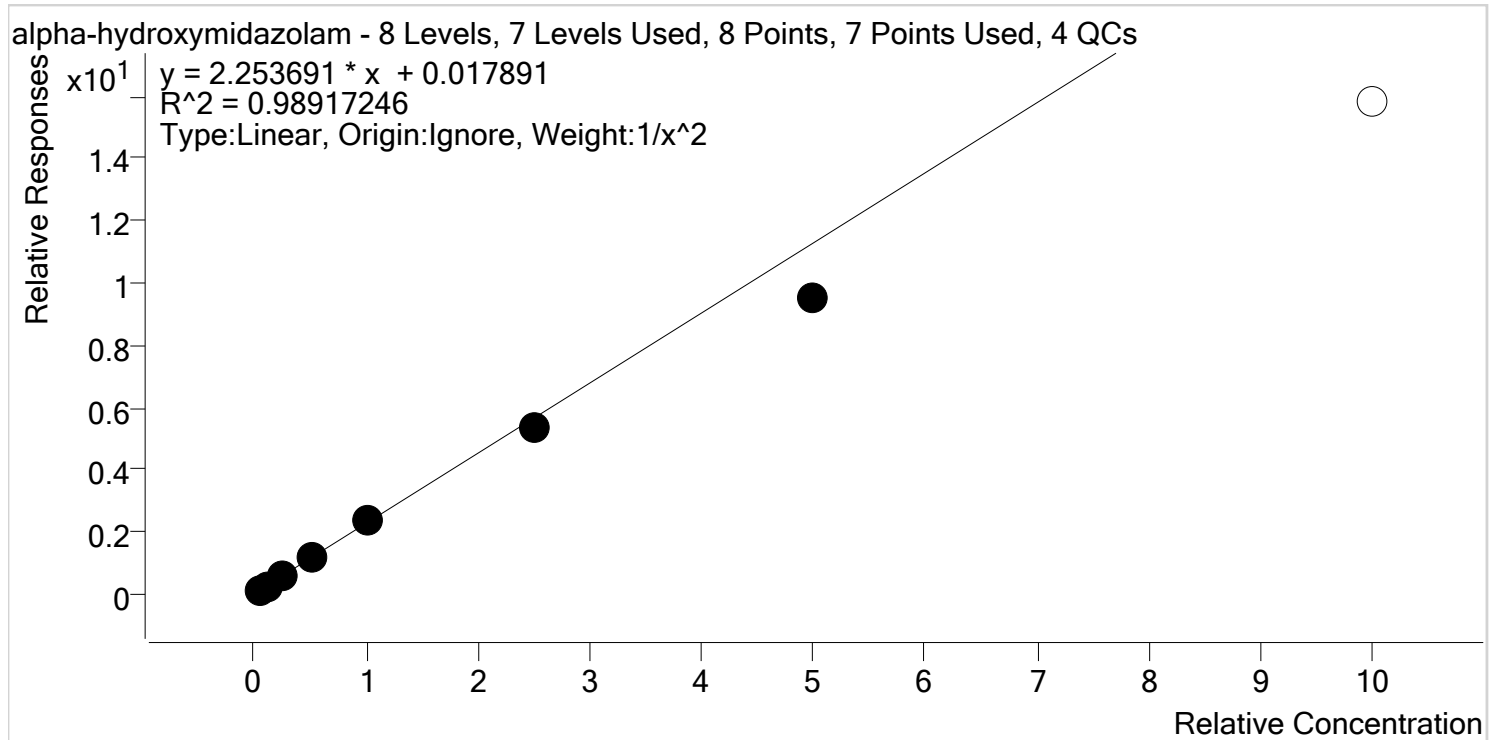
\* Outside curve range.

TS



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

**Batch results** D:\MassHunter\Data\2020\AM 27-28\082820 AM 28 P1 and P2 TS\QuantResults\AM 28 P2\_casework.batch.bin  
**Last Cal. Update** 8/31/2020 11:57 AM  
**Analyst Name** ISP\datastor  
**Analyte** alpha-hydroxymidazolam **Internal Standard** alpha-hydroxymidazolam-D4



| Sample          | Level | Enabled | Expected Concentration | Final Concentration | Accuracy |
|-----------------|-------|---------|------------------------|---------------------|----------|
| p2 Cal 1-5ng    | 1     | ✓       | 5.0                    | 4.7                 | 94.1     |
| p2 Cal 2- 10ng  | 2     | ✓       | 10.0                   | 10.7                | 107.4    |
| p2 Cal 3 -25ng  | 3     | ✓       | 25.0                   | 27.0                | 108.1    |
| p2 Cal 4-50ng   | 4     | ✓       | 50.0                   | 52.7                | 105.5    |
| p2 Cal 5-100ng  | 5     | ✓       | 100.0                  | 104.7               | 104.7    |
| p2 Cal 6-250ng  | 6     | ✓       | 250.0                  | 239.2               | 95.7     |
| p2 Cal 7-500ng  | 7     | ✓       | 500.0                  | 422.2               | 84.4     |
| p2 Cal 8-1000ng | 8     | x       | 1000.0                 | 701.2               | 70.1     |





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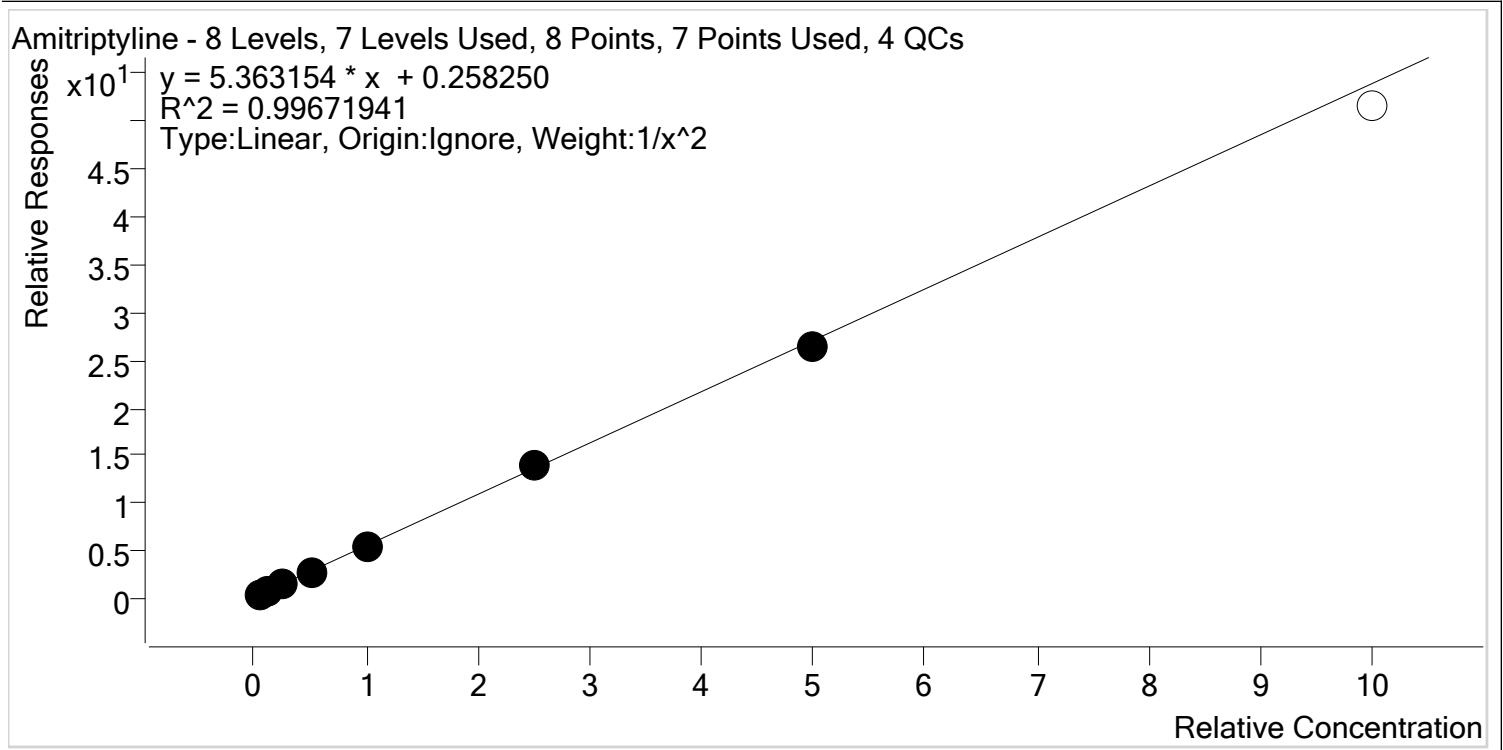
# AM #28 Multi-Drug Quant. Calibration Curve Report

**Batch results** D:\MassHunter\Data\2020\AM 27-28\082820 AM 28 P1 and P2 TS\QuantResults\AM 28 P2\_casework.batch.bin

**Last Cal. Update** 8/31/2020 11:57 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                    | 5.2                 | 103.4    |
| p2 Cal 2- 10ng  | 2     | ✓       | 10.0                   | 9.1                 | 90.7     |
| p2 Cal 3 -25ng  | 3     | ✓       | 25.0                   | 26.5                | 105.9    |
| p2 Cal 4-50ng   | 4     | ✓       | 50.0                   | 50.0                | 99.9     |
| p2 Cal 5-100ng  | 5     | ✓       | 100.0                  | 101.0               | 101.0    |
| p2 Cal 6-250ng  | 6     | ✓       | 250.0                  | 253.3               | 101.3    |
| p2 Cal 7-500ng  | 7     | ✓       | 500.0                  | 488.6               | 97.7     |
| p2 Cal 8-1000ng | 8     | x       | 1000.0                 | 955.8               | 95.6     |



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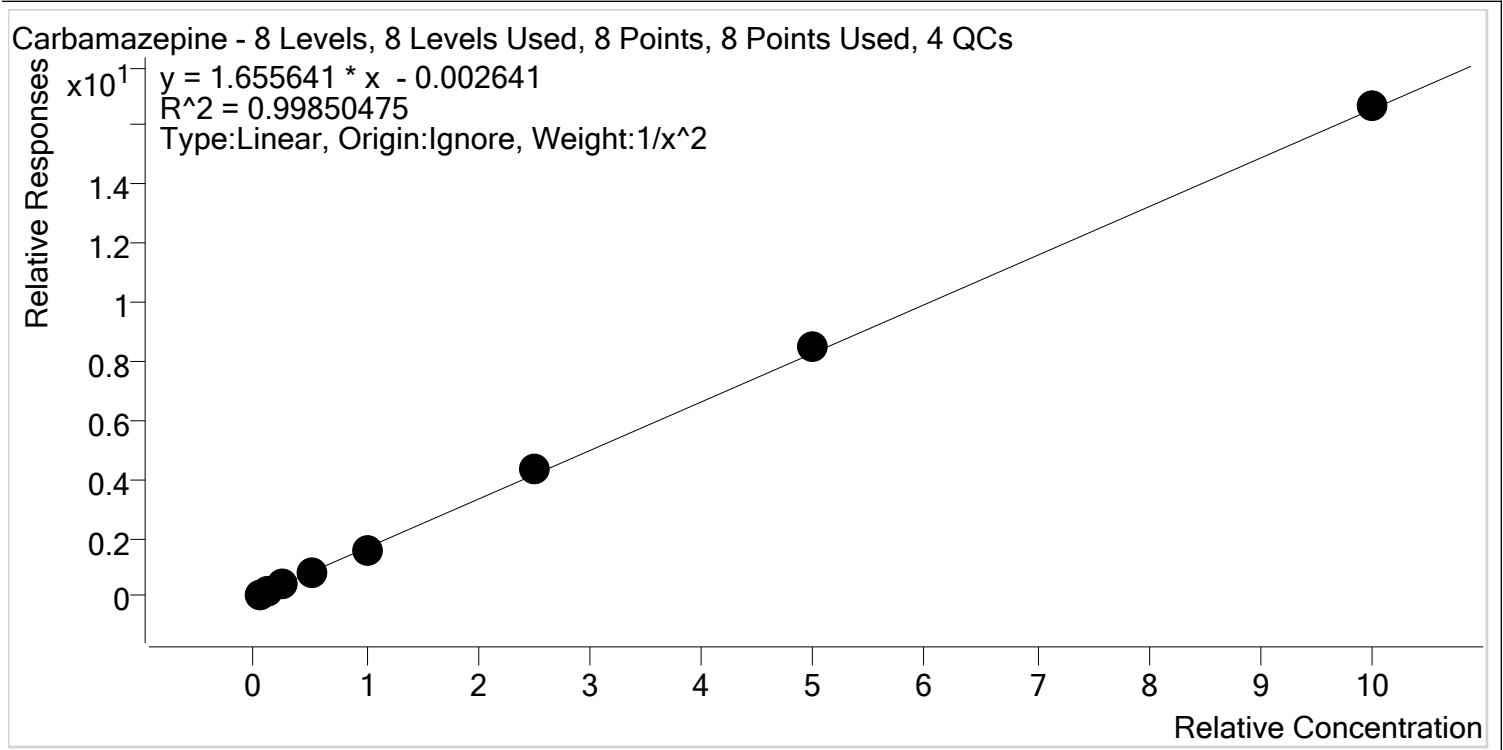
# AM #28 Multi-Drug Quant. Calibration Curve Report

**Batch results** D:\MassHunter\Data\2020\AM 27-28\082820 AM 28 P1 and P2 TS\QuantResults\AM 28 P2\_casework.batch.bin

**Last Cal. Update** 8/31/2020 11:57 AM

**Analyst Name** ISP\datastor

**Analyte** Carbamazepine **Internal Standard** Carbamazepine-13C6



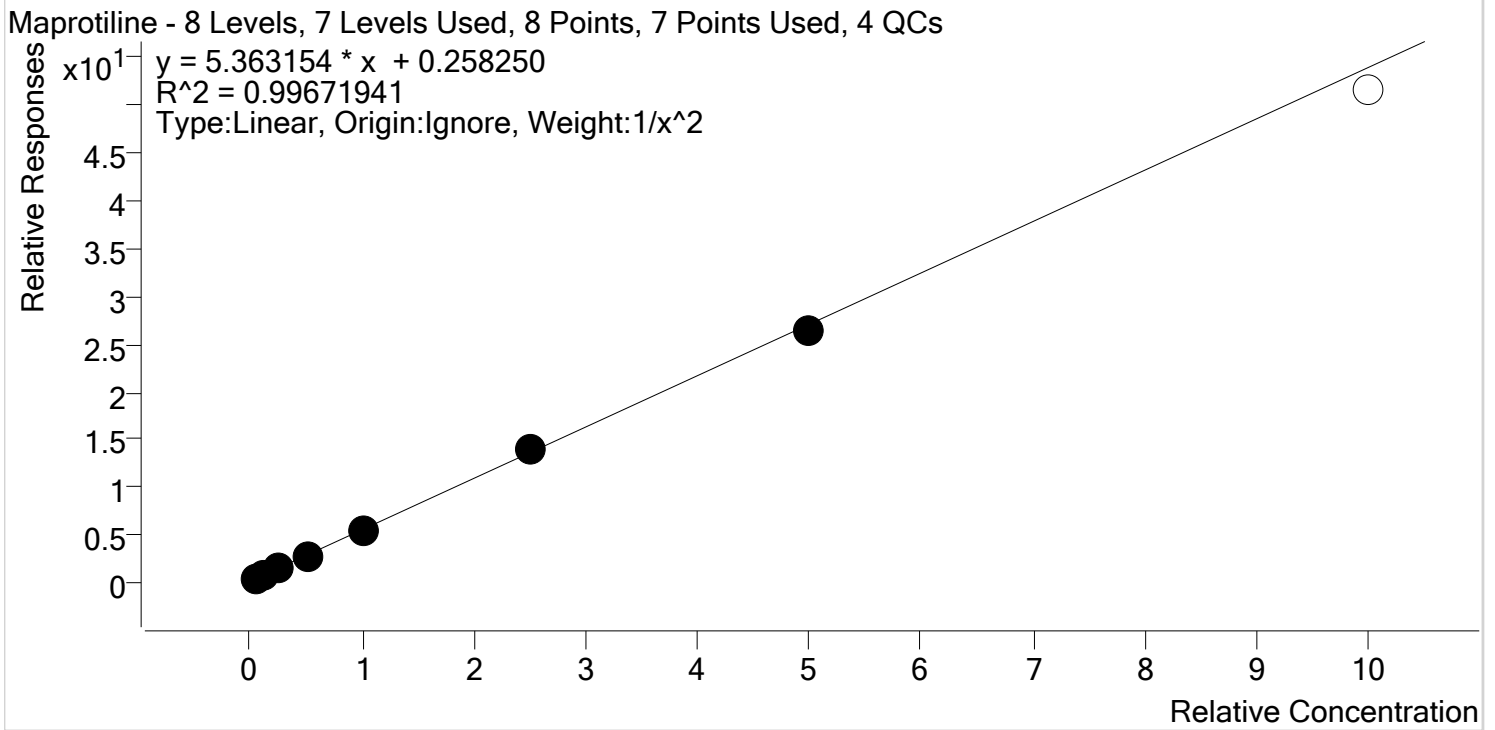
| Sample          | Level | Enabled | Expected Concentration | Final Concentration | Accuracy |
|-----------------|-------|---------|------------------------|---------------------|----------|
| p2 Cal 1-5ng    | 1     | ✓       | 5.0                    | 5.0                 | 99.1     |
| p2 Cal 2- 10ng  | 2     | ✓       | 10.0                   | 10.4                | 104.1    |
| p2 Cal 3 -25ng  | 3     | ✓       | 25.0                   | 24.2                | 96.7     |
| p2 Cal 4-50ng   | 4     | ✓       | 50.0                   | 47.8                | 95.7     |
| p2 Cal 5-100ng  | 5     | ✓       | 100.0                  | 97.3                | 97.3     |
| p2 Cal 6-250ng  | 6     | ✓       | 250.0                  | 261.0               | 104.4    |
| p2 Cal 7-500ng  | 7     | ✓       | 500.0                  | 510.4               | 102.1    |
| p2 Cal 8-1000ng | 8     | ✓       | 1000.0                 | 1006.4              | 100.6    |



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

**Batch results** D:\MassHunter\Data\2020\AM 27-28\082820 AM 28 P1 and P2 TS\QuantResults\AM 28 P2\_casework.batch.bin  
**Last Cal. Update** 8/31/2020 11:57 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                    | 5.2                 | 103.4    |
| p2 Cal 2- 10ng  | 2     | ✓       | 10.0                   | 9.1                 | 90.7     |
| p2 Cal 3 -25ng  | 3     | ✓       | 25.0                   | 26.5                | 105.9    |
| p2 Cal 4-50ng   | 4     | ✓       | 50.0                   | 50.0                | 99.9     |
| p2 Cal 5-100ng  | 5     | ✓       | 100.0                  | 101.0               | 101.0    |
| p2 Cal 6-250ng  | 6     | ✓       | 250.0                  | 253.3               | 101.3    |
| p2 Cal 7-500ng  | 7     | ✓       | 500.0                  | 488.6               | 97.7     |
| p2 Cal 8-1000ng | 8     | x       | 1000.0                 | 955.8               | 95.6     |



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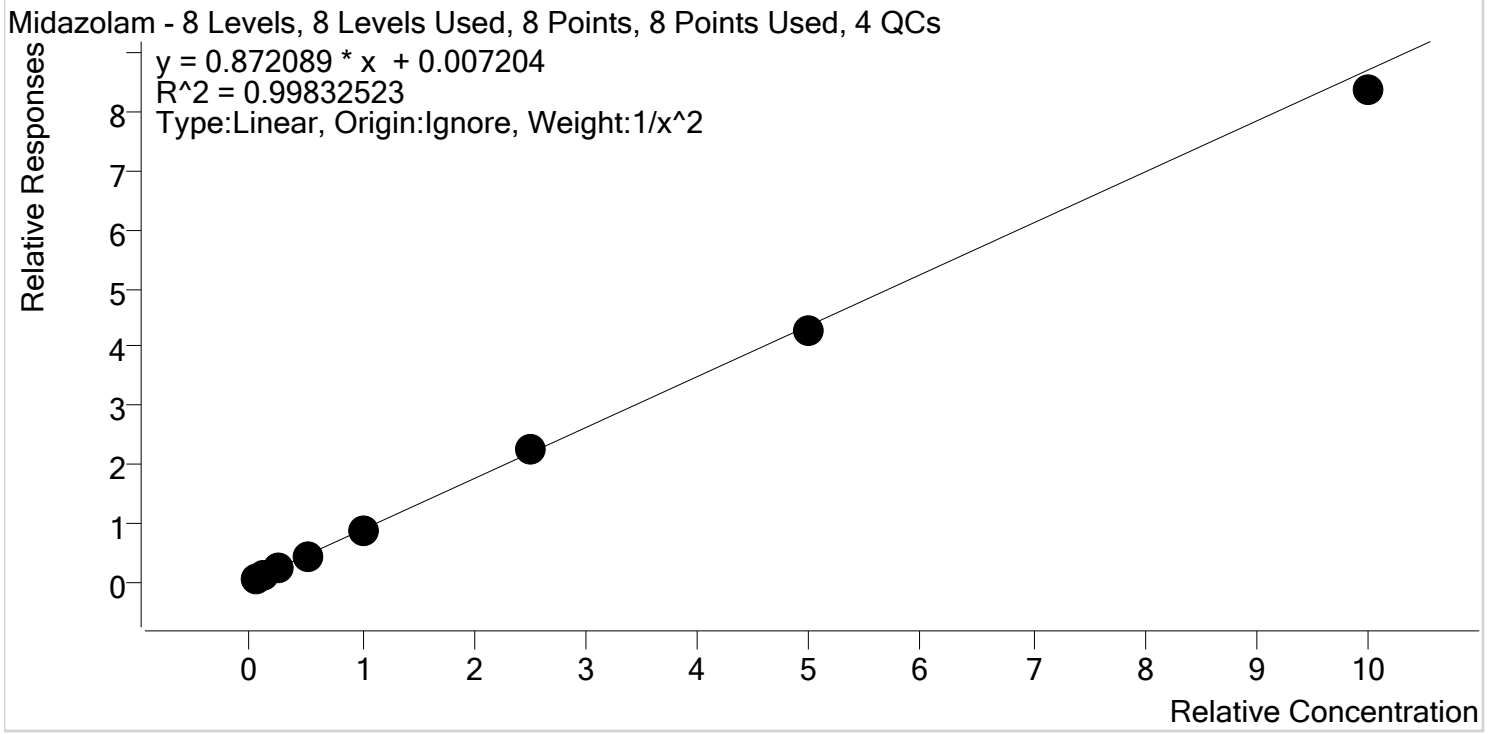
# AM #28 Multi-Drug Quant. Calibration Curve Report

**Batch results** D:\MassHunter\Data\2020\AM 27-28\082820 AM 28 P1 and P2 TS\QuantResults\AM 28 P2\_casework.batch.bin

**Last Cal. Update** 8/31/2020 11:57 AM

**Analyst Name** ISP\datastor

**Analyte** Midazolam **Internal Standard** Midazolam-D4



| Sample          | Level | Enabled | Expected Concentration | Final Concentration | Accuracy |
|-----------------|-------|---------|------------------------|---------------------|----------|
| p2 Cal 1-5ng    | 1     | ✓       | 5.0                    | 4.8                 | 96.5     |
| p2 Cal 2- 10ng  | 2     | ✓       | 10.0                   | 10.6                | 106.4    |
| p2 Cal 3 -25ng  | 3     | ✓       | 25.0                   | 25.6                | 102.4    |
| p2 Cal 4-50ng   | 4     | ✓       | 50.0                   | 48.9                | 97.8     |
| p2 Cal 5-100ng  | 5     | ✓       | 100.0                  | 100.3               | 100.3    |
| p2 Cal 6-250ng  | 6     | ✓       | 250.0                  | 255.8               | 102.3    |
| p2 Cal 7-500ng  | 7     | ✓       | 500.0                  | 490.9               | 98.2     |
| p2 Cal 8-1000ng | 8     | ✓       | 1000.0                 | 960.3               | 96.0     |



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

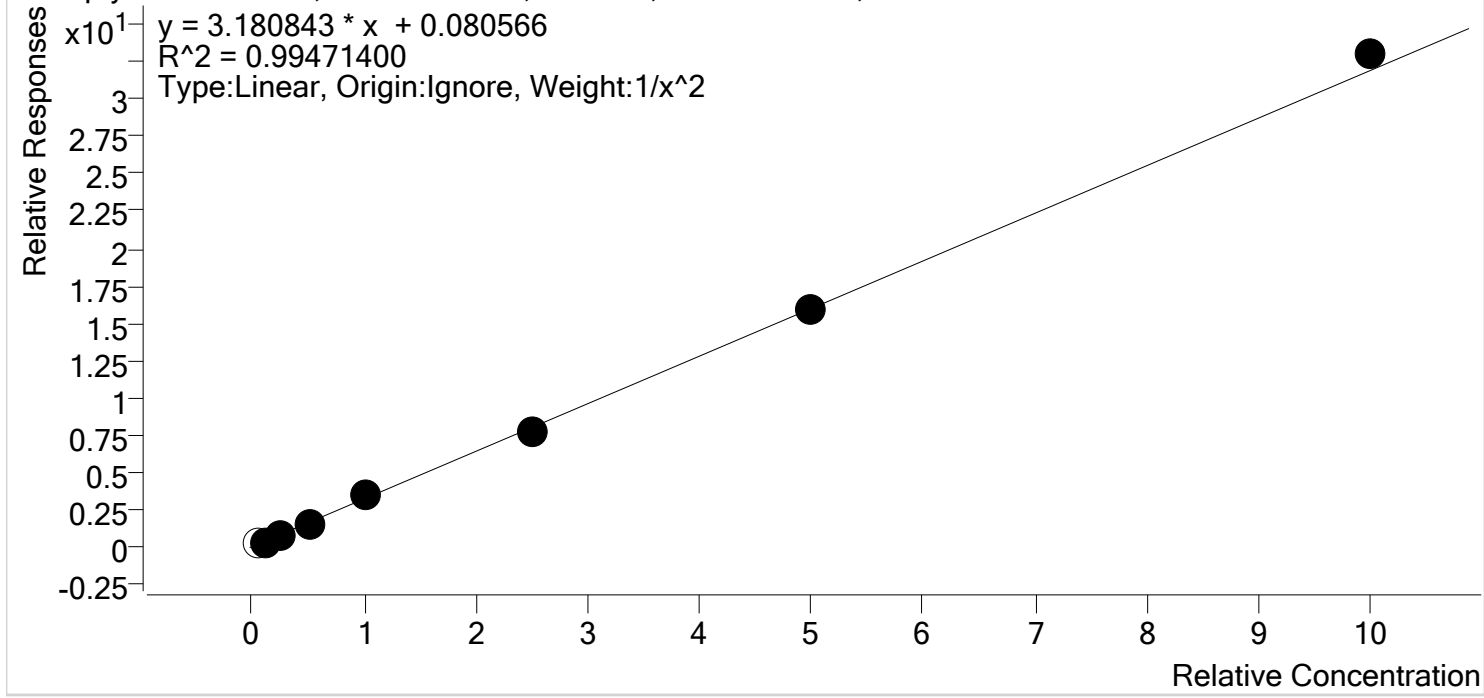
**Batch results** D:\MassHunter\Data\2020\AM 27-28\082820 AM 28 P1 and P2 TS\QuantResults\AM 28 P2\_casework.batch.bin

**Last Cal. Update** 8/31/2020 11:57 AM

**Analyst Name** ISP\datastor

**Analyte** Nortriptyline **Internal Standard** Nortriptyline-d3

Nortriptyline - 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     | x       | 5.0                    | 8.6                 | 171.7    |
| p2 Cal 2- 10ng  | 2     | ✓       | 10.0                   | 10.1                | 101.1    |
| p2 Cal 3 -25ng  | 3     | ✓       | 25.0                   | 25.1                | 100.5    |
| p2 Cal 4-50ng   | 4     | ✓       | 50.0                   | 44.7                | 89.4     |
| p2 Cal 5-100ng  | 5     | ✓       | 100.0                  | 109.8               | 109.8    |
| p2 Cal 6-250ng  | 6     | ✓       | 250.0                  | 241.6               | 96.6     |
| p2 Cal 7-500ng  | 7     | ✓       | 500.0                  | 495.9               | 99.2     |
| p2 Cal 8-1000ng | 8     | ✓       | 1000.0                 | 1034.3              | 103.4    |

TS



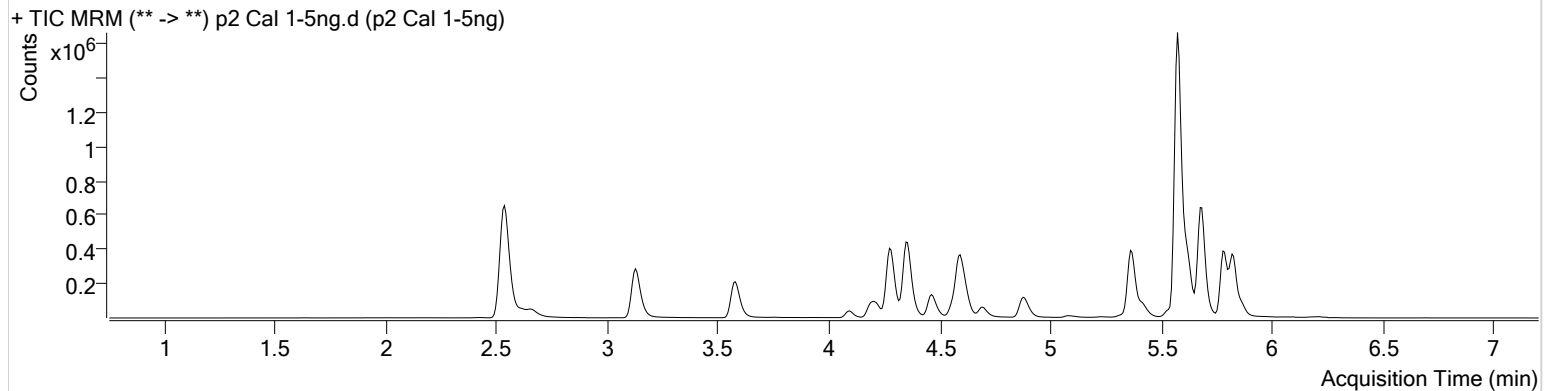
# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2020\AM 27-28\082820 AM 28 P1 and P2 TS\QuantResults\AM 28 P2\_casework.batch.bin  
**Calibration Last Update** 8/31/2020 11:57:22 AM

**Instrument** Falco  
**Type** Cal  
**Acq. Method** MDQ P2 061720.m  
**Sample Position** P1-H6  
**Injection Volume** 2  
**Acq. Date-Time** 8/28/2020 11:47:54 AM  
**Sample Info.**

**Data File** p2 Cal 1-5ng.d  
**Sample** p2 Cal 1-5ng  
**Operator** Tamara Salazar  
**Comment**

## Sample Chromatogram



| Name                   | RT    | Resp.  | S/N      | Ratio | S/N    | ISTD Resp. | Final Conc.  |
|------------------------|-------|--------|----------|-------|--------|------------|--------------|
| alpha-hydroxymidazolam | 5.784 | 55725  | 419.96   | 63.3  | 596.59 | 449607     | 4.7057 ng/ml |
| Amitriptyline          | 5.664 | 7484   | 117.39   | 46.5  | ∞      | 13973      | 5.1721 ng/ml |
| Carbamazepine          | 5.577 | 279933 | 1666.72  | 7.2   | 236.37 | 3527378    | 4.9528 ng/ml |
| Maprotiline            | 5.664 | 7484   | 117.39   | 32.6  | 28.74  | 13973      | 5.1721 ng/ml |
| Midazolam              | 5.791 | 14051  | ∞        | 84.5  | 422.97 | 285100     | 4.8252 ng/ml |
| Nortriptyline          | 5.686 | 3517   | 38183.12 | 29.7  | 106.07 | 9944       | 8.5858 ng/ml |

# AM #28 Multi-Drug Quant. Results



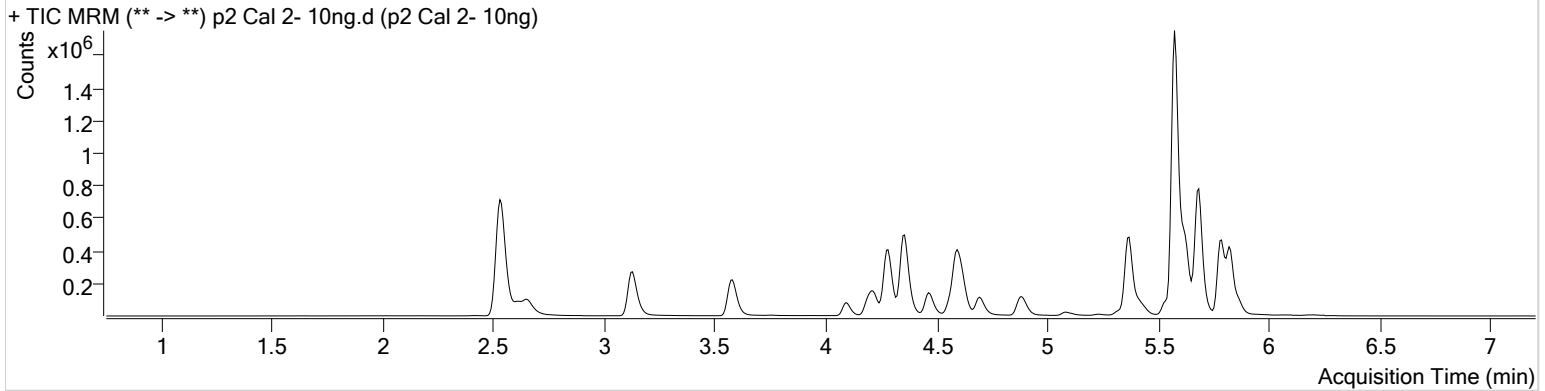
TS

**Batch results** D:\MassHunter\Data\2020\AM 27-28\082820 AM 28 P1 and P2 TS\QuantResults\AM 28 P2\_casework.batch.bin  
**Calibration Last Update** 8/31/2020 11:57:22 AM

**Instrument** Falco  
**Type** Cal  
**Acq. Method** MDQ P2 061720.m  
**Sample Position** P1-G6  
**Injection Volume** 2  
**Acq. Date-Time** 8/28/2020 11:58:35 AM  
**Sample Info.**

**Data File** p2 Cal 2- 10ng.d  
**Sample** p2 Cal 2- 10ng  
**Operator** Tamara Salazar  
**Comment**

## Sample Chromatogram



| Name                   | RT    | Resp.  | S/N     | Ratio | S/N     | ISTD Resp. | Final Conc.   |
|------------------------|-------|--------|---------|-------|---------|------------|---------------|
| alpha-hydroxymidazolam | 5.784 | 114142 | 1378.82 | 63.4  | 6905.29 | 438958     | 10.7441 ng/ml |
| Amitriptyline          | 5.658 | 19911  | 508.03  | 44.3  | 151.75  | 26741      | 9.0677 ng/ml  |
| Carbamazepine          | 5.577 | 577471 | 2623.89 | 7.3   | 4221.39 | 3401996    | 10.4120 ng/ml |
| Maprotiline            | 5.658 | 19911  | 508.03  | 31.8  | 36.77   | 26741      | 9.0677 ng/ml  |
| Midazolam              | 5.791 | 29279  | ∞       | 88.1  | 708.78  | 292750     | 10.6422 ng/ml |
| Nortriptyline          | 5.686 | 9503   | 165.64  | 28.0  | 39.87   | 23638      | 10.1063 ng/ml |

TS

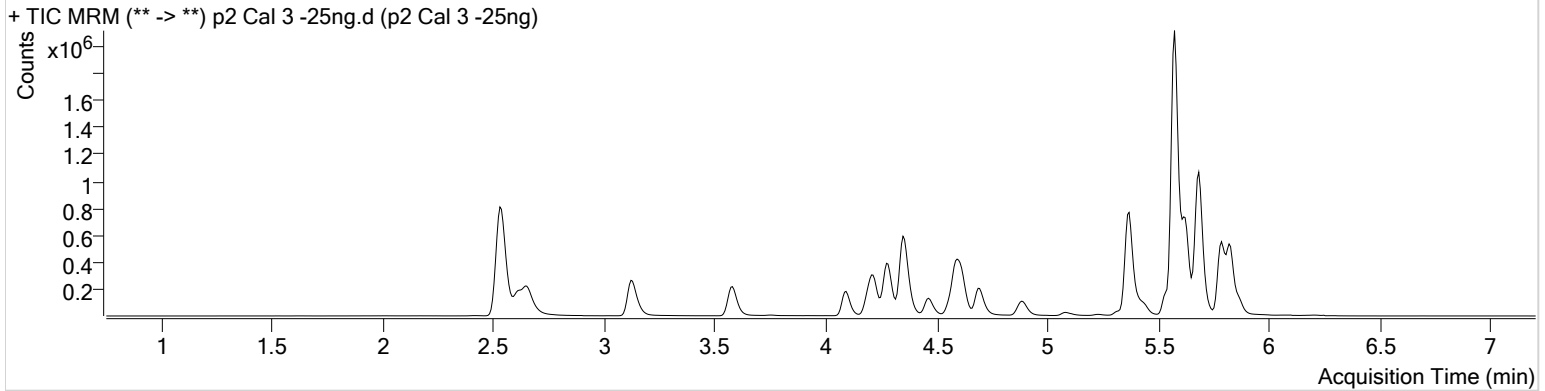


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2020\AM 27-28\082820 AM 28 P1 and P2 TS\QuantResults\AM 28 P2\_casework.batch.bin  
**Calibration Last Update** 8/31/2020 11:57:22 AM

|                         |                       |                  |                  |
|-------------------------|-----------------------|------------------|------------------|
| <b>Instrument</b>       | Falco                 | <b>Data File</b> | p2 Cal 3 -25ng.d |
| <b>Type</b>             | Cal                   | <b>Sample</b>    | p2 Cal 3 -25ng   |
| <b>Acq. Method</b>      | MDQ P2 061720.m       | <b>Operator</b>  | Tamara Salazar   |
| <b>Sample Position</b>  | P1-F6                 | <b>Comment</b>   |                  |
| <b>Injection Volume</b> | 2                     |                  |                  |
| <b>Acq. Date-Time</b>   | 8/28/2020 12:09:04 PM |                  |                  |
| <b>Sample Info.</b>     |                       |                  |                  |

**Sample Chromatogram**



| Name                   | RT    | Resp.   | S/N     | Ratio | S/N     | ISTD Resp. | Final Conc.   |
|------------------------|-------|---------|---------|-------|---------|------------|---------------|
| alpha-hydroxymidazolam | 5.784 | 238254  | 2320.22 | 60.0  | ∞       | 379961     | 27.0294 ng/ml |
| Amitriptyline          | 5.658 | 15252   | 617.87  | 44.5  | 168.45  | 9092       | 26.4638 ng/ml |
| Carbamazepine          | 5.577 | 1357259 | 9300.49 | 7.7   | 720.98  | 3413706    | 24.1738 ng/ml |
| Maprotiline            | 5.658 | 15252   | 617.87  | 33.9  | 39.28   | 9092       | 26.4638 ng/ml |
| Midazolam              | 5.785 | 54445   | 258.01  | 87.8  | ∞       | 236272     | 25.5971 ng/ml |
| Nortriptyline          | 5.686 | 7352    | 7548.48 | 30.5  | 2296.03 | 8357       | 25.1229 ng/ml |



TS

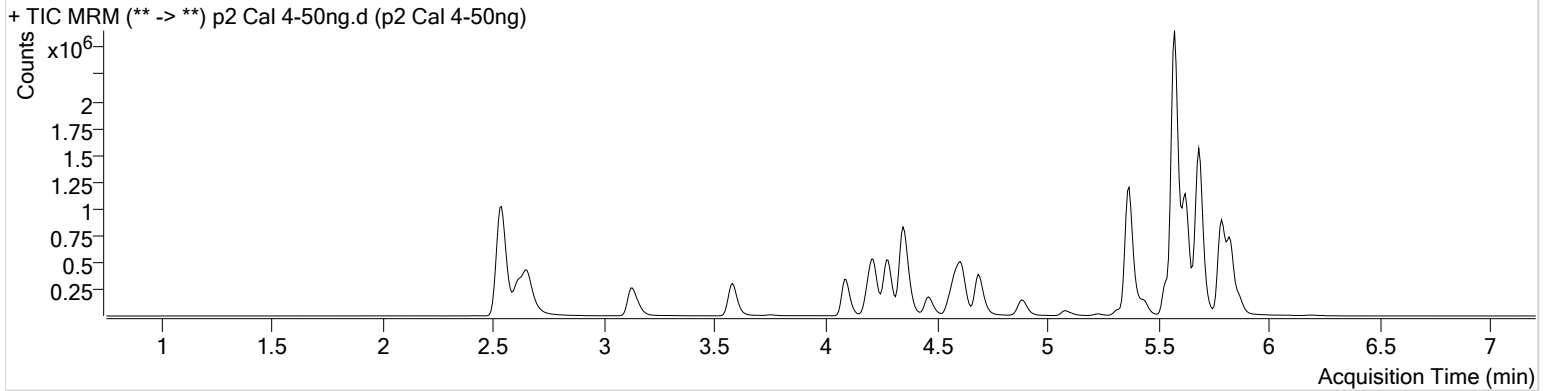


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2020\AM 27-28\082820 AM 28 P1 and P2 TS\QuantResults\AM 28 P2\_casework.batch.bin  
**Calibration Last Update** 8/31/2020 11:57:22 AM

|                         |                       |                  |                 |
|-------------------------|-----------------------|------------------|-----------------|
| <b>Instrument</b>       | Falco                 | <b>Data File</b> | p2 Cal 4-50ng.d |
| <b>Type</b>             | Cal                   | <b>Sample</b>    | p2 Cal 4-50ng   |
| <b>Acq. Method</b>      | MDQ P2 061720.m       | <b>Operator</b>  | Tamara Salazar  |
| <b>Sample Position</b>  | P1-E6                 | <b>Comment</b>   |                 |
| <b>Injection Volume</b> | 2                     |                  |                 |
| <b>Acq. Date-Time</b>   | 8/28/2020 12:19:34 PM |                  |                 |
| <b>Sample Info.</b>     |                       |                  |                 |

**Sample Chromatogram**



| Name                   | RT    | Resp.   | S/N       | Ratio | S/N     | ISTD Resp. | Final Conc.   |
|------------------------|-------|---------|-----------|-------|---------|------------|---------------|
| alpha-hydroxymidazolam | 5.784 | 514210  | 3473.90   | 63.6  | 1095.74 | 426238     | 52.7358 ng/ml |
| Amitriptyline          | 5.658 | 28215   | 165.03    | 46.5  | 105.10  | 9604       | 49.9610 ng/ml |
| Carbamazepine          | 5.577 | 2625135 | 121428.11 | 7.7   | 1494.49 | 3326362    | 47.8263 ng/ml |
| Maprotiline            | 5.658 | 28215   | 165.03    | 29.6  | 76.26   | 9604       | 49.9610 ng/ml |
| Midazolam              | 5.785 | 116562  | 1061.84   | 94.7  | 4791.61 | 268742     | 48.9087 ng/ml |
| Nortriptyline          | 5.686 | 11849   | 30283.96  | 32.3  | 136.36  | 7889       | 44.6864 ng/ml |

TS

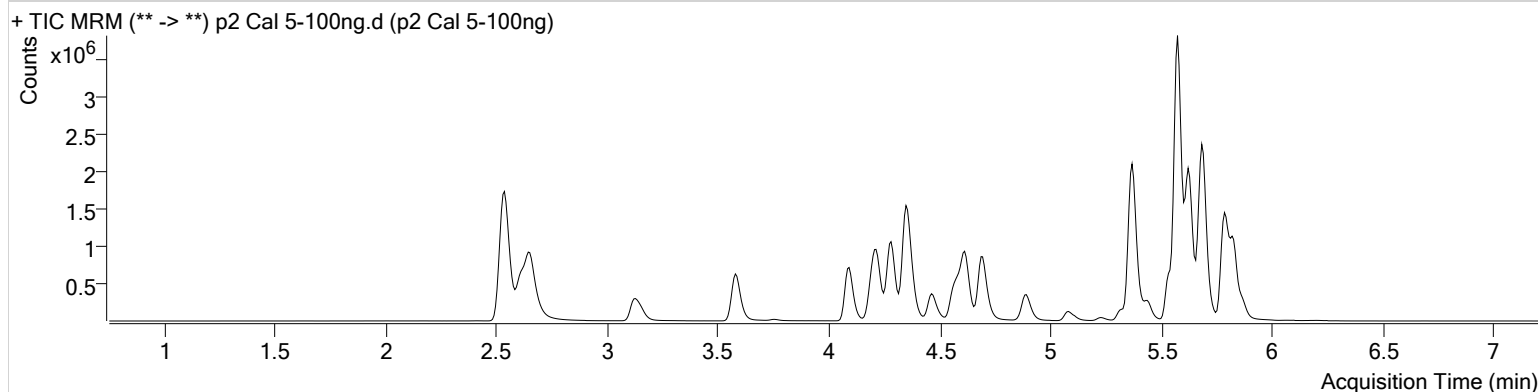


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2020\AM 27-28\082820 AM 28 P1 and P2 TS\QuantResults\AM 28 P2\_casework.batch.bin  
**Calibration Last Update** 8/31/2020 11:57:22 AM

|                         |                       |                  |                  |
|-------------------------|-----------------------|------------------|------------------|
| <b>Instrument</b>       | Falco                 | <b>Data File</b> | p2 Cal 5-100ng.d |
| <b>Type</b>             | Cal                   | <b>Sample</b>    | p2 Cal 5-100ng   |
| <b>Acq. Method</b>      | MDQ P2 061720.m       | <b>Operator</b>  | Tamara Salazar   |
| <b>Sample Position</b>  | P1-D6                 | <b>Comment</b>   |                  |
| <b>Injection Volume</b> | 2                     |                  |                  |
| <b>Acq. Date-Time</b>   | 8/28/2020 12:30:05 PM |                  |                  |
| <b>Sample Info.</b>     |                       |                  |                  |

## Sample Chromatogram



| Name                   | RT    | Resp.   | S/N      | Ratio | S/N      | ISTD Resp. | Final Conc.    |
|------------------------|-------|---------|----------|-------|----------|------------|----------------|
| alpha-hydroxymidazolam | 5.777 | 1000275 | 7502.52  | 62.4  | 6308.36  | 420552     | 104.7433 ng/ml |
| Amitriptyline          | 5.657 | 84662   | 3105.73  | 46.0  | 142.09   | 14912      | 101.0468 ng/ml |
| Carbamazepine          | 5.577 | 5219685 | 7057.82  | 7.8   | 14512.20 | 3244108    | 97.3408 ng/ml  |
| Maprotiline            | 5.657 | 84662   | 3105.73  | 30.0  | 211.23   | 14912      | 101.0468 ng/ml |
| Midazolam              | 5.785 | 244721  | 527.51   | 91.9  | ∞        | 277410     | 100.3289 ng/ml |
| Nortriptyline          | 5.686 | 33876   | 33617.22 | 30.8  | ∞        | 9479       | 109.8277 ng/ml |

TS

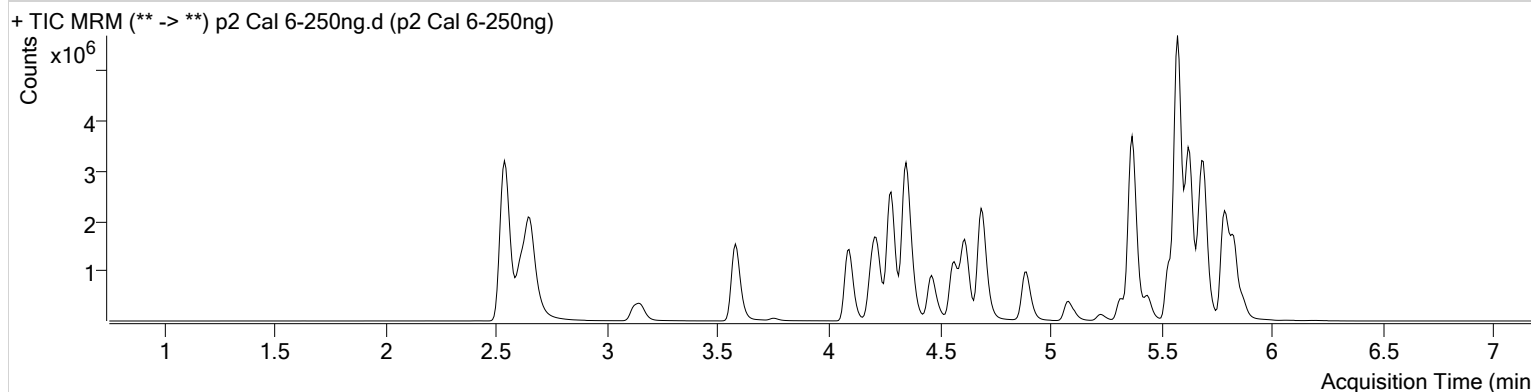


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2020\AM 27-28\082820 AM 28 P1 and P2 TS\QuantResults\AM 28 P2\_casework.batch.bin  
**Calibration Last Update** 8/31/2020 11:57:22 AM

|                         |                       |                  |                  |
|-------------------------|-----------------------|------------------|------------------|
| <b>Instrument</b>       | Falco                 | <b>Data File</b> | p2 Cal 6-250ng.d |
| <b>Type</b>             | Cal                   | <b>Sample</b>    | p2 Cal 6-250ng   |
| <b>Acq. Method</b>      | MDQ P2 061720.m       | <b>Operator</b>  | Tamara Salazar   |
| <b>Sample Position</b>  | P1-C6                 | <b>Comment</b>   |                  |
| <b>Injection Volume</b> | 2                     |                  |                  |
| <b>Acq. Date-Time</b>   | 8/28/2020 12:40:35 PM |                  |                  |
| <b>Sample Info.</b>     |                       |                  |                  |

## Sample Chromatogram



| Name                   | RT    | Resp.    | S/N      | Ratio | S/N     | ISTD Resp. | Final Conc.    |
|------------------------|-------|----------|----------|-------|---------|------------|----------------|
| alpha-hydroxymidazolam | 5.777 | 1794172  | ∞        | 62.3  | 1115.48 | 331723     | 239.1967 ng/ml |
| Amitriptyline          | 5.658 | 177251   | 783.37   | 47.2  | 387.99  | 12802      | 253.3360 ng/ml |
| Carbamazepine          | 5.577 | 10464697 | 9429.53  | 7.9   | 5813.67 | 2422911    | 261.0288 ng/ml |
| Maprotiline            | 5.658 | 177251   | 783.37   | 27.7  | 452.21  | 12802      | 253.3360 ng/ml |
| Midazolam              | 5.791 | 512737   | 2865.17  | 90.1  | 1061.00 | 229105     | 255.7991 ng/ml |
| Nortriptyline          | 5.686 | 59287    | 21054.14 | 28.7  | 3191.54 | 7635       | 241.5780 ng/ml |

TS

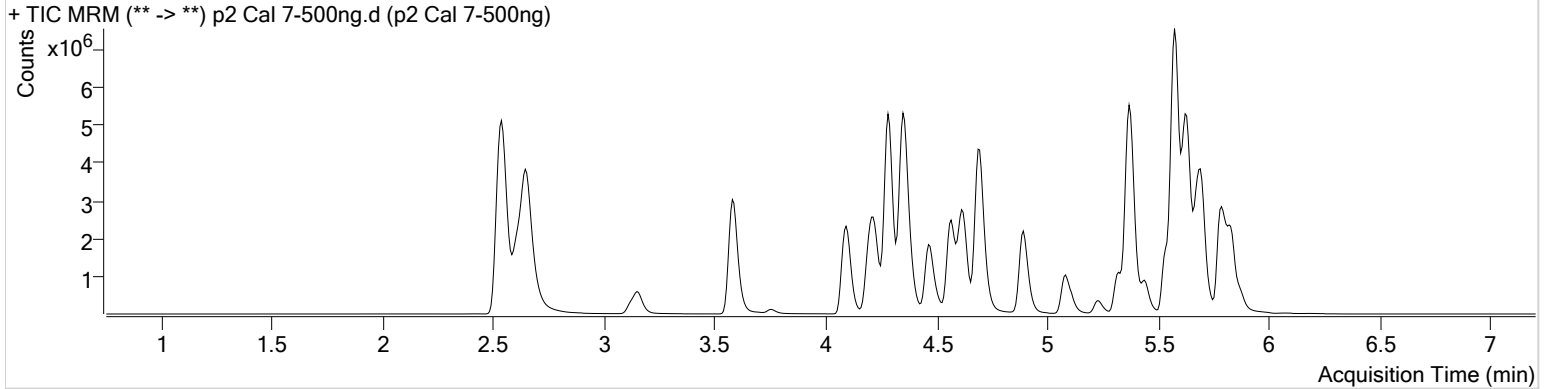


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2020\AM 27-28\082820 AM 28 P1 and P2 TS\QuantResults\AM 28 P2\_casework.batch.bin  
**Calibration Last Update** 8/31/2020 11:57:22 AM

|                         |                       |                  |                  |
|-------------------------|-----------------------|------------------|------------------|
| <b>Instrument</b>       | Falco                 | <b>Data File</b> | p2 Cal 7-500ng.d |
| <b>Type</b>             | Cal                   | <b>Sample</b>    | p2 Cal 7-500ng   |
| <b>Acq. Method</b>      | MDQ P2 061720.m       | <b>Operator</b>  | Tamara Salazar   |
| <b>Sample Position</b>  | P1-B6                 | <b>Comment</b>   |                  |
| <b>Injection Volume</b> | 2                     |                  |                  |
| <b>Acq. Date-Time</b>   | 8/28/2020 12:51:05 PM |                  |                  |
| <b>Sample Info.</b>     |                       |                  |                  |

**Sample Chromatogram**



| Name                   | RT    | Resp.    | S/N       | Ratio | S/N      | ISTD Resp. | Final Conc.    |
|------------------------|-------|----------|-----------|-------|----------|------------|----------------|
| alpha-hydroxymidazolam | 5.777 | 2432002  | 4196.25   | 63.3  | 1957.30  | 255132     | 422.1713 ng/ml |
| Amitriptyline          | 5.657 | 613174   | 3287.51   | 48.1  | 1083.33  | 23171      | 488.6131 ng/ml |
| Carbamazepine          | 5.577 | 15797449 | 456684.79 | 8.5   | 1568.68  | 1869986    | 510.4086 ng/ml |
| Maprotiline            | 5.657 | 613174   | 3287.51   | 25.8  | 11299.77 | 23171      | 488.6131 ng/ml |
| Midazolam              | 5.785 | 819651   | 1539.62   | 90.7  | 3521.22  | 191123     | 490.9354 ng/ml |
| Nortriptyline          | 5.686 | 186031   | 155789.07 | 29.3  | 510.71   | 11733      | 495.9424 ng/ml |

TS

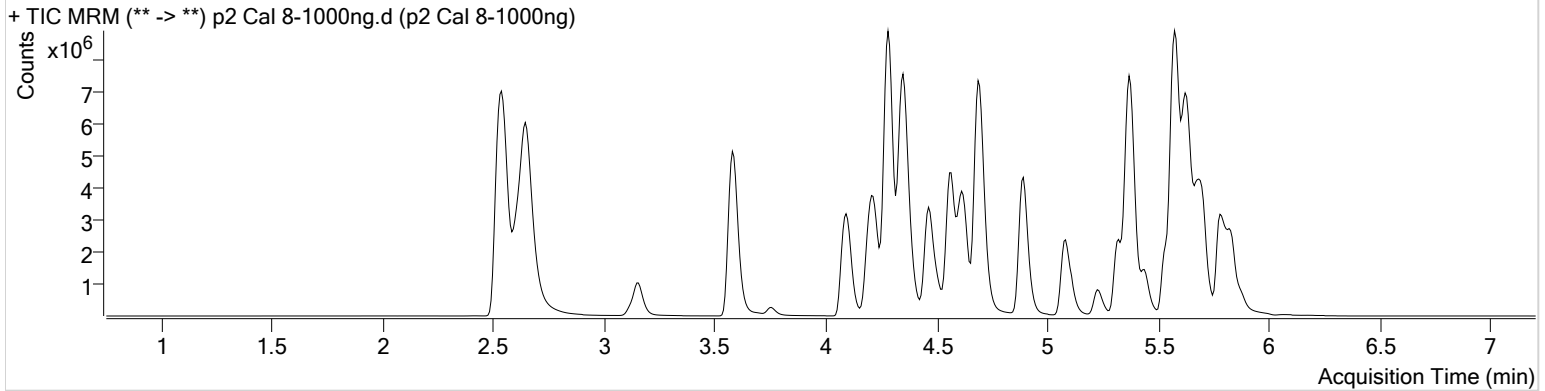


# AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\2020\AM 27-28\082820 AM 28 P1 and P2 TS\QuantResults\AM 28 P2\_casework.batch.bin  
**Calibration Last Update** 8/31/2020 11:57:22 AM

|                         |                      |                  |                   |
|-------------------------|----------------------|------------------|-------------------|
| <b>Instrument</b>       | Falco                | <b>Data File</b> | p2 Cal 8-1000ng.d |
| <b>Type</b>             | Cal                  | <b>Sample</b>    | p2 Cal 8-1000ng   |
| <b>Acq. Method</b>      | MDQ P2 061720.m      | <b>Operator</b>  | Tamara Salazar    |
| <b>Sample Position</b>  | P1-A6                | <b>Comment</b>   |                   |
| <b>Injection Volume</b> | 2                    |                  |                   |
| <b>Acq. Date-Time</b>   | 8/28/2020 1:01:35 PM |                  |                   |
| <b>Sample Info.</b>     |                      |                  |                   |

**Sample Chromatogram**



| Name                   | RT    | Resp.    | S/N      | Ratio           | S/N      | ISTD Resp. | Final Conc.     |
|------------------------|-------|----------|----------|-----------------|----------|------------|-----------------|
| alpha-hydroxymidazolam | 5.770 | 2888939  | 6715.61  | 63.4            | 875.86   | 182599     | 701.2212 ng/ml  |
| Amitriptyline          | 5.658 | 1119514  | 16502.66 | 48.4            | 1648.72  | 21731      | 955.7513 ng/ml  |
| Carbamazepine          | 5.577 | 20946066 | ∞        | 9.1             | 25079.13 | 1257266    | 1006.4171 ng/ml |
| Maprotiline            | 5.658 | 1119514  | 16502.66 | 22.5 <b>Low</b> | 2591.85  | 21731      | 955.7513 ng/ml  |
| Midazolam              | 5.785 | 1176749  | ∞        | 88.7            | 781.87   | 140390     | 960.3150 ng/ml  |
| Nortriptyline          | 5.686 | 284581   | ∞        | 30.8            | 740.92   | 8629       | 1034.2542 ng/ml |