Effective Date:

Monday, February 25, 2019

Test Updates

Immediate Action

In our continuing effort to provide you with the highest quality toxicology laboratory services available, we have compiled important changes regarding a number of tests we perform. Listed below are the types of changes that may be included in this notification, effective Monday, February 25, 2019

Test Changes - Tests that have had changes to the method/ CPT code, units of measurement, scope of analysis, reference comments, or specimen requirements.

Discontinued Tests - Tests being discontinued with alternate testing suggestions.

Please use this information to update your computer systems/records. These changes are important to ensure standardization of our mutual laboratory databases.

If you have any questions about the information contained in this notification, please call our Client Support Department at (866) 522-2206. Thank you for your continued support of NMS Labs and your assistance in implementing these changes.

The CPT Codes provided in this document are based on AMA guidelines and are for informational purposes only. NMS Labs does not assume responsibility for billing errors due to reliance on the CPT Codes listed in this document.

NMS Labs
3701 Welsh Road, PO Box 433A
Willow Grove, PA 19090-0437
nms@nmslabs.com

Test Updates

Test Code	Test Name	Test Name	Method / CPT Code	Specimen Req.	Stability	Scope	Units	Reference Comments	Discontinue
0487SP	Atovaquone, Serum/Plasma		•	•	•			•	
52020B	Chlorzoxazone Confirmation, Blood		•	•	•			•	
52020FL	Chlorzoxazone Confirmation, Fluid								•
52020SP	Chlorzoxazone Confirmation, Serum/Plasma		•	•	•			•	
52020TI	Chlorzoxazone Confirmation, Tissue								•
52020U	Chlorzoxazone Confirmation, Urine								•
1255B	Chlorzoxazone, Blood		•	•	•			•	
1255SP	Chlorzoxazone, Serum/Plasma		•	•	•			•	
1255U	Chlorzoxazone, Urine								•
54455B	DUID/DRE Primidone and PEMA Confirmation, Blood		•	•	•			•	
2136B	Fosphenytoin as Metabolite, Blood	•	•	•				•	
2136SP	Fosphenytoin as Metabolite, Serum/Plasma	•	•	•	•			•	
2456SP	Isotretinoin, Serum/Plasma	•	•	•	•			•	
52069B	Mephenytoin and Metabolite Confirmation, Blood								•
52069FL	Mephenytoin and Metabolite Confirmation, Fluid								•
52069SP	Mephenytoin and Metabolite Confirmation, Serum/Plasma								•
52069TI	Mephenytoin and Metabolite Confirmation, Tissue								•
2620SP	Mephenytoin and Metabolite, Serum/Plasma								•
52070B	Mephobarbital and Metabolite Confirmation, Blood								•
52070FL	Mephobarbital and Metabolite Confirmation, Fluid								•
52070SP	Mephobarbital and Metabolite Confirmation, Serum/Plasma								•
52070TI	Mephobarbital and Metabolite Confirmation, Tissue								•
2630B	Mephobarbital and Metabolite, Blood								•
2630SP	Mephobarbital and Metabolite, Serum/Plasma								•
52078B	Methsuximide as Metabolite Confirmation, Blood		•	•				•	
52078FL	Methsuximide as Metabolite Confirmation, Fluid		•	•					
52078SP	Methsuximide as Metabolite Confirmation, Serum/Plasma		•	•	•			•	
5644SP	Methsuximide as Metabolite Confirmation, Serum/Plasma								•

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Test Code	Test Name	Test Name	Method / CPT Code	Specimen Req.	Stability	Scope	Units	Reference Comments	Discontinue
52078TI	Methsuximide as Metabolite Confirmation, Tissue		•						
9336SP	Methsuximide as Metabolite Screen, Serum/Plasma								•
2950B	Methsuximide as Metabolite, Blood		•	•				•	
2950SP	Methsuximide as Metabolite, Serum/Plasma		•	•	•			•	
3380B	Pemoline, Blood								•
3380SP	Pemoline, Serum/Plasma								•
3582SP	Phenobarbital - Total/Unbound/Bound, Serum/Plasma	•	•	•		•		•	
3581SP	Phenobarbital - Unbound, Serum/Plasma	•	•	•		•			
9416B	Phenobarbital Screen, Blood		•	•				•	
9416SP	Phenobarbital Screen, Serum/Plasma		•	•	•			•	
3580B	Phenobarbital, Blood		•	•				•	
3580SP	Phenobarbital, Serum/Plasma		•	•	•			•	
3707B	Phenylethylmalonamide, Blood		•	•	•			•	
3707SP	Phenylethylmalonamide, Serum/Plasma		•	•				•	
3751SP	Phenytoin - Total, Serum/Plasma								•
54105B	Phenytoin Confirmation (DUID/DRE), Blood		•	•				•	
52105B	Phenytoin Confirmation, Blood		•	•				•	
5673B	Phenytoin Confirmation, Blood								•
52105FL	Phenytoin Confirmation, Fluid		•	•					
5673FL	Phenytoin Confirmation, Fluid								•
52105SP	Phenytoin Confirmation, Serum/Plasma		•	•	•			•	
5673SP	Phenytoin Confirmation, Serum/Plasma								•
52105TI	Phenytoin Confirmation, Tissue		•						
52105U	Phenytoin Confirmation, Urine		•	•					
9239B	Phenytoin Screen, Blood								•
9239FL	Phenytoin Screen, Fluid								•
9239SP	Phenytoin Screen, Serum/Plasma								•
3743B	Phenytoin, Blood		•	•				•	
3743FL	Phenytoin, Fluid		•	•					
3743SP	Phenytoin, Serum/Plasma		•	•	•			•	
3743TI	Phenytoin, Tissue		•						

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Test Code	Test Name	Test Name	Method / CPT Code	Specimen Req.	Stability	Scope	Units	Reference Comments	Discontinue
52106B	Primidone, Phenobarbital and PEMA Confirmation, Blood		•	•	•			•	
52106FL	Primidone, Phenobarbital and PEMA Confirmation, Fluid		•	•					
52106SP	Primidone, Phenobarbital and PEMA Confirmation, Serum/Plasma		•	•	•			•	
52106TI	Primidone, Phenobarbital and PEMA Confirmation, Tissue		•						
3900B	Primidone, Phenobarbital and PEMA, Blood		•	•	•			•	
3900FL	Primidone, Phenobarbital and PEMA, Fluid		•	•					
3900SP	Primidone, Phenobarbital and PEMA, Serum/Plasma		•	•	•			•	
3901SP	Primidone, Serum/Plasma		•		•			•	
5962U	Synthetic Cannabinoid Metabolites Confirmation (Qualitative) - Expanded (2019 Scope), Urine	•				•			
9562U	Synthetic Cannabinoid Metabolites Screen - Expanded (2019 Scope), Urine (Forensic)	•				•			
4283U	Synthetic Cannabinoid Metabolites-Expanded (Qualitative) (2019 Scope), Urine	•				•			
4759SP	Valproic Acid - Unbound and Total, Serum/Plasma	•	•	•	•	•		•	
52162B	Valproic Acid Confirmation, Blood (CSA)		•	•				•	
52162FL	Valproic Acid Confirmation, Fluid (CSA)		•	•					
52162SP	Valproic Acid Confirmation, Serum/Plasma (CSA)		•	•				•	
52162TI	Valproic Acid Confirmation, Tissue (CSA)		•						
52162U	Valproic Acid Confirmation, Urine (CSA)		•	•					
9552B	Valproic Acid Screen (Add-On), Blood (Forensic) (CSA)		•	•				•	
9552FL	Valproic Acid Screen (Add-On), Fluid (Forensic) (CSA)		•	•					
9552SP	Valproic Acid Screen (Add-On), Serum/Plasma (Forensic) (CSA)		•	•				•	
9552TI	Valproic Acid Screen (Add-On), Tissue (Forensic) (CSA)		•						
9552U	Valproic Acid Screen (Add-On), Urine (Forensic) (CSA)		•	•					
4757B	Valproic Acid, Blood		•	•				•	
4757FL	Valproic Acid, Fluid		•	•					
4757SP	Valproic Acid, Serum/Plasma		•	•				•	
4760SP	Valproic Acid, Serum/Plasma								•

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Test Code	Test Name	Test Name	Method / CPT Code	Specimen Req.	Stability	Scope	Units	Reference Comments	Discontinue
4757TI	Valproic Acid, Tissue		•						
4761SP	Valproic Acid, Unbound, Serum/Plasma	•	•	•		•			
4757U	Valproic Acid, Urine		•	•					

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Test Updates

Test Changes

0487SP Atovaquone, Serum/Plasma

Summary of Changes:	Specimen Requirements (Specimen Container) were changed. Specimen Requirements (Special Handling) were changed. Stability was changed. Reference Comment was changed. Methods/CPT Codes were changed [LC-MS/MS (80375)]

Specimen Requirements:	1 mL Serum or Plasma
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	Serum: Collect sample in Red top tube Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube. Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria:	Polymer gel separation tube (SST or PST).
Stability:	Room Temperature: 14 day(s) Refrigerated: 14 day(s) Frozen (-20 °C): 14 day(s)
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80375): Atovaquone

Compound Name	Units	Reference Comment
Atovaquone	mcg/mL	Failure to administer Atovaquone with food may result in lower Atovaquone plasma concentrations. The recommended therapeutic range in plasma is 14 +/- 7 mcg/mL for treatment of malaria.

52020B Chlorzoxazone Confirmation, Blood

Summary of Changes:	Specimen Requirements were changed. Specimen Requirements (Specimen Container) were changed. Stability was changed. Reference Comment was changed. Methods/CPT Codes were changed [LC-MS/MS (80369)]

Specimen Requirements:	1 mL Blood
Transport Temperature:	Refrigerated
Specimen Container:	Lavender top tube (EDTA)
Light Protection:	Not Required
Special Handling:	None
Rejection Criteria:	None
Stability:	Room Temperature: 14 day(s) Refrigerated: 14 day(s) Frozen (-20 °C): 14 day(s)

Test Updates

Test Changes

Scope of Analysis: LC-MS/MS (80369): Chlorzoxazone
Method (CPT Code)

Compound Name	Units	Reference Comment
Chlorzoxazone	mcg/mL	Healthy men given a single oral dose of 750 mg attained an average peak plasma concentration of 36 +/- 2 mcg/mL at approximately 38 minutes. The blood to plasma ratio is not known.

52020SP Chlorzoxazone Confirmation, Serum/Plasma

Summary of Changes:
Specimen Requirements were changed.
Specimen Requirements (Specimen Container) were changed.
Stability was changed.
Reference Comment was changed.
Methods/CPT Codes were changed [LC-MS/MS (80369)]

Specimen Requirements: 1 mL Serum or Plasma
Transport Temperature: Refrigerated
Specimen Container: Plastic container (preservative-free)
Light Protection: Not Required
Special Handling: Serum: Collect sample in Red top tube
Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube.
Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria: Polymer gel separation tube (SST or PST).
Stability: Room Temperature: 14 day(s)
Refrigerated: 14 day(s)
Frozen (-20 °C): 14 day(s)
Scope of Analysis: LC-MS/MS (80369): Chlorzoxazone
Method (CPT Code)

Compound Name	Units	Reference Comment
Chlorzoxazone	mcg/mL	Healthy men given a single oral dose of 750 mg attained an average peak plasma concentration of 36 +/- 2 mcg/mL at approximately 38 minutes.

1255B Chlorzoxazone, Blood

Summary of Changes:
Specimen Requirements were changed.
Specimen Requirements (Specimen Container) were changed.
Stability was changed.
Reference Comment was changed.
Methods/CPT Codes were changed [LC-MS/MS (80369)]

Test Updates

Test Changes

Specimen Requirements:	1 mL Blood
Transport Temperature:	Refrigerated
Specimen Container:	Lavender top tube (EDTA)
Light Protection:	Not Required
Special Handling:	None
Rejection Criteria:	None
Stability:	Room Temperature: 14 day(s) Refrigerated: 14 day(s) Frozen (-20 °C): 14 day(s)
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80369): Chlorzoxazone

Compound Name	Units	Reference Comment
Chlorzoxazone	mcg/mL	Healthy men given a single oral dose of 750 mg attained an average peak plasma concentration of 36 +/- 2 mcg/mL at approximately 38 minutes. The blood to plasma ratio is not known.

1255SP Chlorzoxazone, Serum/Plasma

Summary of Changes:	Specimen Requirements were changed. Specimen Requirements (Specimen Container) were changed. Specimen Requirements (Special Handling) were changed. Stability was changed. Reference Comment was changed. Methods/CPT Codes were changed [LC-MS/MS (80369)]

Specimen Requirements:	1 mL Serum or Plasma
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	Serum: Collect sample in Red top tube Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube. Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria:	Polymer gel separation tube (SST or PST).
Stability:	Room Temperature: 14 day(s) Refrigerated: 14 day(s) Frozen (-20 °C): 14 day(s)
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80369): Chlorzoxazone

Test Updates

Test Changes

Compound Name	Units	Reference Comment
Chlorzoxazone	mcg/mL	Healthy men given a single oral dose of 750 mg attained an average peak plasma concentration of 36 +/- 2 mcg/mL at approximately 38 minutes.

54455B DUID/DRE Primidone and PEMA Confirmation, Blood

Summary of Changes:
Specimen Requirements were changed.
Specimen Requirements (Specimen Container) were changed.
Stability was changed.
Reference Comment was changed.
Methods/CPT Codes were changed [LC-MS/MS (80184, 80188)]

Specimen Requirements: 1 mL Blood
Transport Temperature: Refrigerated
Specimen Container: Lavender top tube (EDTA)
Light Protection: Not Required
Special Handling: None
Rejection Criteria: None
Stability: Room Temperature: 14 day(s)
Refrigerated: 14 day(s)
Frozen (-20 °C): 14 day(s)
Scope of Analysis: Method (CPT Code): LC-MS/MS (80184, 80188): Primidone, Phenylethylmalonamide (PEMA)

Compound Name	Units	Reference Comment
Primidone	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with primidone: 5-10 mcg/mL. The blood to plasma ratio is approximately 1.
Phenylethylmalonamide (PEMA)	mcg/mL	Following a single oral dose of 400 mg Primidone to elderly men: 12 +/- 3 mcg PEMA/mL serum. The blood to plasma ratio is unknown.

2136B Fosphenytoin as Metabolite, Blood

Summary of Changes:
Test Name was changed.
Specimen Requirements were changed.
Specimen Requirements (Specimen Container) were changed.
Reference Comment was changed.
Methods/CPT Codes were changed [LC-MS/MS (80185)]

Test Updates

Test Changes

Specimen Requirements:	1 mL Blood
Transport Temperature:	Refrigerated
Specimen Container:	Lavender top tube (EDTA)
Light Protection:	Not Required
Special Handling:	None
Rejection Criteria:	None
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80185): Phenytoin

Compound Name	Units	Reference Comment
Phenytoin	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with phenytoin: 10-20 mcg/mL The blood to plasma ratio is approximately 0.5.

2136SP Fosphenytoin as Metabolite, Serum/Plasma

Summary of Changes:	Test Name was changed. Specimen Requirements were changed. Stability was changed. Reference Comment was changed. Methods/CPT Codes were changed [LC-MS/MS (80185)]

Specimen Requirements:	1 mL Serum or Plasma
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	Serum: Collect sample in Red top tube Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube. Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria:	Polymer gel separation tube (SST or PST).
Stability:	Room Temperature: 14 day(s) Refrigerated: 14 day(s) Frozen (-20 °C): 3 month(s)
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80185): Phenytoin

Compound Name	Units	Reference Comment
Phenytoin	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with phenytoin: 10-20 mcg/mL

2456SP Isotretinoin, Serum/Plasma

Test Changes

Summary of Changes:	Test Name was changed. Specimen Requirements were changed. Specimen Requirements (Specimen Container) were changed. Specimen Requirements (Special Handling) were changed. Stability was changed. Reference Comment was changed. Methods/CPT Codes were changed [LC-MS/MS (80375)]

Specimen Requirements:	1 mL Serum or Plasma
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Yes
Special Handling:	Serum: Collect sample in Red top tube Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube. Promptly centrifuge and separate Serum or Plasma into a light protected plastic screw capped vial using approved guidelines.
Rejection Criteria:	Not received Light Protected. Polymer gel separation tube (SST or PST).
Stability:	Room Temperature: 14 day(s) Refrigerated: 14 day(s) Frozen (-20 °C): 14 day(s)
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80375): Isotretinoin

Compound Name	Units	Reference Comment
Isotretinoin	ng/mL	Patients taking 30 to 50 mg daily oral isotretinoin for 3 months had steady state plasma isotretinoin concentrations ranging from 91 to 291 ng/mL and an elimination half-life ranging from 10 to 37 hours. Compounds known to interfere with this substance: 9-cis, 13-cis-retinoic acid.

52078B Methsuximide as Metabolite Confirmation, Blood

Summary of Changes:	Specimen Requirements were changed. Reference Comment was changed. Methods/CPT Codes were changed [LC-MS/MS (80339)]

Specimen Requirements:	1 mL Blood
Transport Temperature:	Refrigerated
Specimen Container:	Lavender top tube (EDTA)
Light Protection:	Not Required
Special Handling:	None
Rejection Criteria:	None
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80339): Normethsuximide

Test Updates

Test Changes

Compound Name	Units	Reference Comment
Normethsuximide	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with methsuximide: 10-40 mcg/mL The blood to plasma ratio is not known.

52078FL Methsuximide as Metabolite Confirmation, Fluid

Summary of Changes: Specimen Requirements were changed.
Methods/CPT Codes were changed [LC-MS/MS (80339)]

Specimen Requirements: 2 mL Fluid
Transport Temperature: Refrigerated
Specimen Container: Plastic container (preservative-free)
Light Protection: Not Required
Special Handling: None
Rejection Criteria: None
Scope of Analysis: Method (CPT Code): LC-MS/MS (80339): Normethsuximide

52078SP Methsuximide as Metabolite Confirmation, Serum/Plasma

Summary of Changes: Specimen Requirements were changed.
Stability was changed.
Reference Comment was changed.
Methods/CPT Codes were changed [LC-MS/MS (80339)]

Specimen Requirements: 1 mL Serum or Plasma
Transport Temperature: Refrigerated
Specimen Container: Plastic container (preservative-free)
Light Protection: Not Required
Special Handling: Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria: Polymer gel separation tube (SST or PST).
Stability: Room Temperature: 7 day(s)
Refrigerated: 14 day(s)
Frozen (-20 °C): 14 day(s)
Scope of Analysis: Method (CPT Code): LC-MS/MS (80339): Normethsuximide

Compound Name	Units	Reference Comment
Normethsuximide	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with methsuximide: 10-40 mcg/mL

52078TI Methsuximide as Metabolite Confirmation, Tissue

Test Updates

Test Changes

Summary of Changes: Methods/CPT Codes were changed [LC-MS/MS (80339)]

Scope of Analysis: Method (CPT Code): LC-MS/MS (80339): Normethsuximide

2950B Methsuximide as Metabolite, Blood

Summary of Changes: Specimen Requirements were changed.
Reference Comment was changed.
Methods/CPT Codes were changed [LC-MS/MS (80339)]

Specimen Requirements: 1 mL Blood
Transport Temperature: Refrigerated
Specimen Container: Lavender top tube (EDTA)
Light Protection: Not Required
Special Handling: None
Rejection Criteria: None
Scope of Analysis: Method (CPT Code): LC-MS/MS (80339): Normethsuximide

Compound Name	Units	Reference Comment
Normethsuximide	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with methsuximide: 10-40 mcg/mL The blood to plasma ratio is not known.

2950SP Methsuximide as Metabolite, Serum/Plasma

Summary of Changes: Specimen Requirements were changed.
Stability was changed.
Reference Comment was changed.
Methods/CPT Codes were changed [LC-MS/MS (80339)]

Specimen Requirements: 1 mL Serum or Plasma
Transport Temperature: Refrigerated
Specimen Container: Plastic container (preservative-free)
Light Protection: Not Required
Special Handling: Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria: Polymer gel separation tube (SST or PST).
Stability: Room Temperature: 7 day(s)
Refrigerated: 14 day(s)
Frozen (-20 °C): 14 day(s)
Scope of Analysis: Method (CPT Code): LC-MS/MS (80339): Normethsuximide

Test Updates

Test Changes

Compound Name	Units	Reference Comment
Normethsuximide	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with methsuximide: 10-40 mcg/mL

3582SP Phenobarbital - Total/Unbound/Bound, Serum/Plasma

Summary of Changes:
Test Name was changed.
Specimen Requirements were changed.
Scope of Analysis was changed.
Phenobarbital - Unbound was added.
Reference Comment was changed.
Methods/CPT Codes were changed [LC-MS/MS (80184), LC-MS/MS (80184)]
Phenobarbital - Free was removed.

Specimen Requirements: 2 mL Serum or Plasma
Transport Temperature: Refrigerated
Specimen Container: Plastic container (preservative-free)
Light Protection: Not Required
Special Handling: Serum: Collect sample in Red top tube
Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube.
Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria: Polymer gel separation tube (SST or PST).
Scope of Analysis: LC-MS/MS (80184): Phenobarbital - Unbound
Method (CPT Code) LC-MS/MS (80184): Phenobarbital - Total, Phenobarbital - Bound

Compound Name	Units	Reference Comment
Phenobarbital - Unbound	mcg/mL	Approximately 54% of phenobarbital is unbound to serum proteins (free) at therapeutic concentrations.
Phenobarbital - Total	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with primidone: 10-40 mcg/mL.
Phenobarbital - Bound	mcg/mL	Phenobarbital - Bound is calculated by subtracting Phenobarbital - Unbound from Phenobarbital - Total.

3581SP Phenobarbital - Unbound, Serum/Plasma

Summary of Changes:
Test Name was changed.
Specimen Requirements were changed.
Specimen Requirements (Special Handling) were changed.
Scope of Analysis was changed.
Phenobarbital - Unbound was added.
Methods/CPT Codes were changed [LC-MS/MS (80184)]
Phenobarbital - Free was removed.

Test Updates

Test Changes

Specimen Requirements:	2 mL Serum or Plasma
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	Serum: Collect sample in Red top tube Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube. Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria:	Polymer gel separation tube (SST or PST).
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80184): Phenobarbital - Unbound

Compound Name	Units	Reference Comment
Phenobarbital - Unbound	mcg/mL	Approximately 54% of phenobarbital is unbound to serum proteins (free) at therapeutic concentrations.

9416B Phenobarbital Screen, Blood

Summary of Changes:	Specimen Requirements were changed. Specimen Requirements (Specimen Container) were changed. Reference Comment was changed. Methods/CPT Codes were changed [LC-MS/MS (80307)]

Specimen Requirements:	2 mL Blood
Transport Temperature:	Refrigerated
Specimen Container:	Lavender top tube (EDTA)
Light Protection:	Not Required
Special Handling:	None
Rejection Criteria:	None
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80307): Phenobarbital

Compound Name	Units	Reference Comment
Phenobarbital	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with primidone: 10-40 mcg/mL. The blood to plasma ratio is approximately 0.8.

9416SP Phenobarbital Screen, Serum/Plasma

Summary of Changes:	Specimen Requirements were changed. Stability was changed. Reference Comment was changed. Methods/CPT Codes were changed [LC-MS/MS (80307)]

Test Updates

Test Changes

Specimen Requirements:	2 mL Serum or Plasma
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	Serum: Collect sample in Red top tube Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube. Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria:	Polymer gel separation tube (SST or PST).
Stability:	Room Temperature: 14 day(s) Refrigerated: 14 day(s) Frozen (-20 °C): 14 day(s)
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80307): Phenobarbital

Compound Name	Units	Reference Comment
Phenobarbital	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with primidone: 10-40 mcg/mL.

3580B Phenobarbital, Blood

Summary of Changes:	Specimen Requirements were changed. Specimen Requirements (Specimen Container) were changed. Reference Comment was changed. Methods/CPT Codes were changed [LC-MS/MS (80184)]

Specimen Requirements:	1 mL Blood
Transport Temperature:	Refrigerated
Specimen Container:	Lavender top tube (EDTA)
Light Protection:	Not Required
Special Handling:	None
Rejection Criteria:	None
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80184): Phenobarbital

Compound Name	Units	Reference Comment
Phenobarbital	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with primidone: 10-40 mcg/mL. The blood to plasma ratio is approximately 0.8.

3580SP Phenobarbital, Serum/Plasma

Test Changes

Summary of Changes: Specimen Requirements were changed.
Stability was changed.
Reference Comment was changed.
Methods/CPT Codes were changed [LC-MS/MS (80184)]

Specimen Requirements: 1 mL Serum or Plasma
Transport Temperature: Refrigerated
Specimen Container: Plastic container (preservative-free)
Light Protection: Not Required
Special Handling: Serum: Collect sample in Red top tube
Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube.
Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria: Polymer gel separation tube (SST or PST).
Stability: Room Temperature: 14 day(s)
Refrigerated: 14 day(s)
Frozen (-20 °C): 14 day(s)
Scope of Analysis: Method (CPT Code) LC-MS/MS (80184): Phenobarbital

Compound Name	Units	Reference Comment
Phenobarbital	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with primidone: 10-40 mcg/mL.

3707B Phenylethylmalonamide, Blood

Summary of Changes: Specimen Requirements were changed.
Specimen Requirements (Specimen Container) were changed.
Stability was changed.
Reference Comment was changed.
Methods/CPT Codes were changed [LC-MS/MS (80339)]

Specimen Requirements: 1 mL Blood
Transport Temperature: Refrigerated
Specimen Container: Lavender top tube (EDTA)
Light Protection: Not Required
Special Handling: None
Rejection Criteria: None
Stability: Room Temperature: 14 day(s)
Refrigerated: 14 day(s)
Frozen (-20 °C): 14 day(s)
Scope of Analysis: Method (CPT Code) LC-MS/MS (80339): Phenylethylmalonamide (PEMA)

Test Updates

Test Changes

Compound Name	Units	Reference Comment
Phenylethylmalonamide (PEMA)	mcg/mL	Following a single oral dose of 400 mg Primidone to elderly men: 12 +/- 3 mcg PEMA/mL serum. The blood to plasma ratio is unknown.

3707SP Phenylethylmalonamide, Serum/Plasma

Summary of Changes: Specimen Requirements were changed.
Reference Comment was changed.
Methods/CPT Codes were changed [LC-MS/MS (80339)]

Specimen Requirements: 1 mL Serum or Plasma
Transport Temperature: Refrigerated
Specimen Container: Plastic container (preservative-free)
Light Protection: Not Required
Special Handling: Serum: Collect sample in Red top tube
Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube.
Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria: Polymer gel separation tube (SST or PST).
Scope of Analysis: Method (CPT Code) LC-MS/MS (80339): Phenylethylmalonamide (PEMA)

Compound Name	Units	Reference Comment
Phenylethylmalonamide (PEMA)	mcg/mL	Following a single oral dose of 400 mg Primidone to elderly men: 12 +/- 3 mcg PEMA/mL serum.

54105B Phenytoin Confirmation (DUID/DRE), Blood

Summary of Changes: Specimen Requirements were changed.
Specimen Requirements (Specimen Container) were changed.
Reference Comment was changed.
Methods/CPT Codes were changed [LC-MS/MS (80185)]

Specimen Requirements: 1 mL Blood
Transport Temperature: Refrigerated
Specimen Container: Lavender top tube (EDTA)
Light Protection: Not Required
Special Handling: None
Rejection Criteria: None
Scope of Analysis: Method (CPT Code) LC-MS/MS (80185): Phenytoin

Test Updates

Test Changes

Compound Name	Units	Reference Comment
Phenytoin	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with phenytoin: 10-20 mcg/mL The blood to plasma ratio is approximately 0.5.

52105B Phenytoin Confirmation, Blood

Summary of Changes: Specimen Requirements were changed.
Specimen Requirements (Specimen Container) were changed.
Reference Comment was changed.
Methods/CPT Codes were changed [LC-MS/MS (80185)]

Specimen Requirements: 1 mL Blood
Transport Temperature: Refrigerated
Specimen Container: Lavender top tube (EDTA)
Light Protection: Not Required
Special Handling: None
Rejection Criteria: None
Scope of Analysis: Method (CPT Code) LC-MS/MS (80185): Phenytoin

Compound Name	Units	Reference Comment
Phenytoin	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with phenytoin: 10-20 mcg/mL The blood to plasma ratio is approximately 0.5.

52105FL Phenytoin Confirmation, Fluid

Summary of Changes: Specimen Requirements were changed.
Methods/CPT Codes were changed [LC-MS/MS (80185)]

Specimen Requirements: 2 mL Fluid
Transport Temperature: Refrigerated
Specimen Container: Plastic container (preservative-free)
Light Protection: Not Required
Special Handling: None
Rejection Criteria: None
Scope of Analysis: Method (CPT Code) LC-MS/MS (80185): Phenytoin

52105SP Phenytoin Confirmation, Serum/Plasma

Test Updates

Test Changes

Summary of Changes:	Specimen Requirements were changed. Specimen Requirements (Special Handling) were changed. Stability was changed. Reference Comment was changed. Methods/CPT Codes were changed [LC-MS/MS (80185)]

Specimen Requirements:	1 mL Serum or Plasma
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	Serum: Collect sample in Red top tube Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube. Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria:	Polymer gel separation tube (SST or PST).
Stability:	Room Temperature: 14 day(s) Refrigerated: 14 day(s) Frozen (-20 °C): 3 month(s)
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80185): Phenytoin

Compound Name	Units	Reference Comment
Phenytoin	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with phenytoin: 10-20 mcg/mL

52105TI Phenytoin Confirmation, Tissue

Summary of Changes:	Methods/CPT Codes were changed [LC-MS/MS (80185)]

Scope of Analysis: Method (CPT Code)	LC-MS/MS (80185): Phenytoin

52105U Phenytoin Confirmation, Urine

Summary of Changes:	Specimen Requirements were changed. Specimen Requirements (Specimen Container) were changed. Methods/CPT Codes were changed [LC-MS/MS (80185)]

Specimen Requirements:	1 mL Urine
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	None
Rejection Criteria:	None

Test Updates

Test Changes

Scope of Analysis: Method (CPT Code): LC-MS/MS (80185): Phenytoin

3743B Phenytoin, Blood

Summary of Changes:
Specimen Requirements were changed.
Specimen Requirements (Specimen Container) were changed.
Reference Comment was changed.
Methods/CPT Codes were changed [LC-MS/MS (80185)]

Specimen Requirements: 1 mL Blood
Transport Temperature: Refrigerated
Specimen Container: Lavender top tube (EDTA)
Light Protection: Not Required
Special Handling: None
Rejection Criteria: None
Scope of Analysis: Method (CPT Code): LC-MS/MS (80185): Phenytoin

Compound Name	Units	Reference Comment
Phenytoin	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with phenytoin: 10-20 mcg/mL The blood to plasma ratio is approximately 0.5.

3743FL Phenytoin, Fluid

Summary of Changes:
Specimen Requirements were changed.
Methods/CPT Codes were changed [LC-MS/MS (80185)]

Specimen Requirements: 2 mL Fluid
Transport Temperature: Refrigerated
Specimen Container: Plastic container (preservative-free)
Light Protection: Not Required
Special Handling: None
Rejection Criteria: None
Scope of Analysis: Method (CPT Code): LC-MS/MS (80185): Phenytoin

3743SP Phenytoin, Serum/Plasma

Summary of Changes:
Specimen Requirements were changed.
Stability was changed.
Reference Comment was changed.
Methods/CPT Codes were changed [LC-MS/MS (80185)]

NMS Labs
3701 Welsh Road, PO Box 433A
Willow Grove, PA 19090-0437
nms@nmslabs.com

Test Changes

Specimen Requirements:	1 mL Serum or Plasma
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	Serum: Collect sample in Red top tube Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube. Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria:	Polymer gel separation tube (SST or PST).
Stability:	Room Temperature: 14 day(s) Refrigerated: 14 day(s) Frozen (-20 °C): 3 month(s)
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80185): Phenytoin

Compound Name	Units	Reference Comment
Phenytoin	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with phenytoin: 10-20 mcg/mL

3743TI Phenytoin, Tissue

Summary of Changes:	Methods/CPT Codes were changed [LC-MS/MS (80185)]
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80185): Phenytoin

52106B Primidone, Phenobarbital and PEMA Confirmation, Blood

Summary of Changes:	Specimen Requirements were changed. Specimen Requirements (Specimen Container) were changed. Stability was changed. Reference Comment was changed. Methods/CPT Codes were changed [LC-MS/MS (80184, 80188)]

Specimen Requirements:	1 mL Blood
Transport Temperature:	Refrigerated
Specimen Container:	Lavender top tube (EDTA)
Light Protection:	Not Required
Special Handling:	None
Rejection Criteria:	None
Stability:	Room Temperature: 14 day(s) Refrigerated: 14 day(s) Frozen (-20 °C): 14 day(s)
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80184, 80188): Primidone, Phenobarbital, Phenylethylmalonamide (PEMA)

Test Updates

Test Changes

Compound Name	Units	Reference Comment
Primidone	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with primidone: 5-10 mcg/mL. The blood to plasma ratio is approximately 1.
Phenobarbital	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with primidone: 10-40 mcg/mL. The blood to plasma ratio is approximately 0.8.
Phenylethylmalonamide (PEMA)	mcg/mL	Following a single oral dose of 400 mg Primidone to elderly men: 12 +/- 3 mcg PEMA/mL serum. The blood to plasma ratio is unknown.

52106FL Primidone, Phenobarbital and PEMA Confirmation, Fluid

Summary of Changes:	Specimen Requirements were changed. Methods/CPT Codes were changed [LC-MS/MS (80184, 80188)]
Specimen Requirements:	2 mL Fluid
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	None
Rejection Criteria:	None
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80184, 80188): Primidone, Phenobarbital, Phenylethylmalonamide (PEMA)

52106SP Primidone, Phenobarbital and PEMA Confirmation, Serum/Plasma

Summary of Changes:	Specimen Requirements were changed. Stability was changed. Reference Comment was changed. Methods/CPT Codes were changed [LC-MS/MS (80184, 80188)]
Specimen Requirements:	1 mL Serum or Plasma
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	Serum: Collect sample in Red top tube Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube. Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria:	Polymer gel separation tube (SST or PST).

Test Updates

Test Changes

Stability: Room Temperature: 14 day(s)
Refrigerated: 14 day(s)
Frozen (-20 °C): 14 day(s)
Scope of Analysis: LC-MS/MS (80184, 80188): Primidone, Phenobarbital, Phenylethylmalonamide
Method (CPT Code) (PEMA)

Compound Name	Units	Reference Comment
Primidone	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with primidone: 5-10 mcg/mL.
Phenobarbital	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with primidone: 10-40 mcg/mL.
Phenylethylmalonamide (PEMA)	mcg/mL	Following a single oral dose of 400 mg Primidone to elderly men: 12 +/- 3 mcg PEMA/mL serum.

52106TI Primidone, Phenobarbital and PEMA Confirmation, Tissue

Summary of Changes: Methods/CPT Codes were changed [LC-MS/MS (80184, 80188)]

Scope of Analysis: LC-MS/MS (80184, 80188): Primidone, Phenobarbital, Phenylethylmalonamide
Method (CPT Code) (PEMA)

3900B Primidone, Phenobarbital and PEMA, Blood

Summary of Changes: Specimen Requirements were changed.
Specimen Requirements (Specimen Container) were changed.
Stability was changed.
Reference Comment was changed.
Methods/CPT Codes were changed [LC-MS/MS (80184, 80188)]

Specimen Requirements: 1 mL Blood
Transport Temperature: Refrigerated
Specimen Container: Lavender top tube (EDTA)
Light Protection: Not Required
Special Handling: None
Rejection Criteria: None
Stability: Room Temperature: 14 day(s)
Refrigerated: 14 day(s)
Frozen (-20 °C): 14 day(s)
Scope of Analysis: LC-MS/MS (80184, 80188): Primidone, Phenobarbital, Phenylethylmalonamide
Method (CPT Code) (PEMA)

Test Updates

Test Changes

Compound Name	Units	Reference Comment
Primidone	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with primidone: 5-10 mcg/mL. The blood to plasma ratio is approximately 1.
Phenobarbital	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with primidone: 10-40 mcg/mL. The blood to plasma ratio is approximately 0.8.
Phenylethylmalonamide (PEMA)	mcg/mL	Following a single oral dose of 400 mg Primidone to elderly men: 12 +/- 3 mcg PEMA/mL serum. The blood to plasma ratio is unknown.

3900FL Primidone, Phenobarbital and PEMA, Fluid

Summary of Changes:	Specimen Requirements were changed. Methods/CPT Codes were changed [LC-MS/MS (80184, 80188)]
Specimen Requirements:	2 mL Fluid
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	None
Rejection Criteria:	None
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80184, 80188): Primidone, Phenobarbital, Phenylethylmalonamide (PEMA)

3900SP Primidone, Phenobarbital and PEMA, Serum/Plasma

Summary of Changes:	Specimen Requirements were changed. Stability was changed. Reference Comment was changed. Methods/CPT Codes were changed [LC-MS/MS (80184, 80188)]
Specimen Requirements:	1 mL Serum or Plasma
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	Serum: Collect sample in Red top tube Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube. Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria:	Polymer gel separation tube (SST or PST).

Test Updates

Test Changes

Stability: Room Temperature: 14 day(s)
Refrigerated: 14 day(s)
Frozen (-20 °C): 14 day(s)
Scope of Analysis: LC-MS/MS (80184, 80188): Primidone, Phenobarbital, Phenylethylmalonamide (PEMA)
Method (CPT Code)

Compound Name	Units	Reference Comment
Primidone	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with primidone: 5-10 mcg/mL.
Phenobarbital	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with primidone: 10-40 mcg/mL.
Phenylethylmalonamide (PEMA)	mcg/mL	Following a single oral dose of 400 mg Primidone to elderly men: 12 +/- 3 mcg PEMA/mL serum.

3901SP Primidone, Serum/Plasma

Summary of Changes: Stability was changed.
Reference Comment was changed.
Methods/CPT Codes were changed [LC-MS/MS (80188)]

Stability: Room Temperature: 14 day(s)
Refrigerated: 14 day(s)
Frozen (-20 °C): 14 day(s)
Scope of Analysis: LC-MS/MS (80188): Primidone
Method (CPT Code)

Compound Name	Units	Reference Comment
Primidone	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with primidone: 5-10 mcg/mL.

5962U Synthetic Cannabinoid Metabolites Confirmation (Qualitative) - Expanded (2019 Scope), Urine

Summary of Changes: Test Name was changed.
Scope of Analysis was changed.
5-fluoro-PICA 3,3-dimethylbutanoic acid, CHMINACA-3-methylbutanoic acid, FUBICA 3,3-dimethylbutanoic acid, 5-fluoro-PIC-ACID, CHMIC-ACID, 4-carboxy-CUMYL-BINACA, 4-carboxy-AMB-PINACA, 5-fluoro-PINAC-ACID, CHMINACA 3,3-dimethylbutanoic acid, 5-fluoro-PINACA 3-methylbutanoic acid, 5-fluoro-PINACA 3,3-dimethylbutanoic acid, FUBINACA 3-methylbutanoic acid, FUBINACA 3,3-dimethylbutanoic acid, 4-carboxy-NA-PIM and FUBIC-ACID were added.
JWH-018 N-pentanoic acid, UR-144 N-pentanoic acid, AKB48 N-pentanoic acid, AB-FUBINACA oxobutanoic acid, AB-CHMINACA 3-methyl-butanoic

Test Updates

Test Changes

	acid, PB-22 3-Carboxyindole, 5-Fluoro-PB-22 3-Carboxyindole, BB-22 3-Carboxyindole, ADB-PINACA N-pentanoic acid, AB-PINACA N-pentanoic acid, ADBICA N-pentanoic acid, ADB-CHMINACA 3,3-dimethyl-butanoic acid, 5F-AMB 3-methyl-butanoic acid, 5F-ADB 3,3-dimethyl-butanoic acid, FUB-AMB 3-methyl-butanoic acid and MDMB-FUBINACA 3,3-dimethyl-butanoic acid were removed.
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80352): 4-carboxy-NA-PIM, FUBIC-ACID, 5-fluoro-PICA 3,3-dimethylbutanoic acid, CHMINACA-3-methylbutanoic acid, FUBICA 3,3-dimethylbutanoic acid, 5-fluoro-PIC-ACID, CHMIC-ACID, 4-carboxy-CUMYL-BINACA, 4-carboxy-AMB-PINACA, 5-fluoro-PINAC-ACID, CHMINACA 3,3-dimethylbutanoic acid, 5-fluoro-PINACA 3-methylbutanoic acid, 5-fluoro-PINACA 3,3-dimethylbutanoic acid, FUBINACA 3-methylbutanoic acid, FUBINACA 3,3-dimethylbutanoic acid

Compound Name	Units	Reference Comment
4-carboxy-NA-PIM	ng/mL	4-carboxy-NA-PIM (JWH-018 N-pentanoic acid) is a known or presumed metabolite of the following synthetic cannabinoid(s): NA-PIM (JWH-18). It may also be a metabolite of other synthetic cannabinoids with similar structures.
FUBIC-ACID	ng/mL	FUBIC-ACID (FUB-PB-22-Carboxyindole) is a known or presumed metabolite of the following synthetic cannabinoid(s): ADMB-FUBICA (ADB-FUBICA); NA-FUBIM (FUB-JWH-18); NA-FUBIC (FDU-PB-22); MDMB-FUBICA; MMB-FUBICA. It may also be a metabolite of other synthetic cannabinoids with similar structures.
5-fluoro-PICA 3,3-dimethylbutanoic acid	ng/mL	5-fluoro-PICA 3,3-dimethylbutanoic acid is a known or presumed metabolite of the following synthetic cannabinoid(s): 5-fluoro-MDMB-PICA. It may also be a metabolite of other synthetic cannabinoids with similar structures.
CHMINACA-3-methylbutanoic acid	ng/mL	CHMINACA-3-methylbutanoic acid (AB-CHMINACA 3-methyl-butanoic acid) is a known or presumed metabolite of the following synthetic cannabinoid(s): AMB-CHMINACA (AB-CHMINACA); MMB-CHMINACA (MA-CHMINACA). It may also be a metabolite of other synthetic cannabinoids with similar structures.

Test Updates

Test Changes

Compound Name	Units	Reference Comment
FUBICA 3,3-dimethylbutanoic acid	ng/mL	FUBICA 3,3-dimethylbutanoic acid is a known or presumed metabolite of the following synthetic cannabinoid(s): ADMB-FUBICA (ADB-FUBICA); MDMB-FUBICA (5-fluoro AMB). It may also be a metabolite of other synthetic cannabinoids with similar structures.
5-fluoro-PIC-ACID	ng/mL	5-fluoro-PIC-ACID (5-Fluoro-PB-22 3-Carboxyindole) is a known or presumed metabolite of the following synthetic cannabinoid(s): 5-fluoro-MDMB-PICA; 5-fluoro-NA-PIC (NM-221). It may also be a metabolite of other synthetic cannabinoids with similar structures.
CHMIC-ACID	ng/mL	CHMIC-ACID (BB-22 3-Carboxyindole) is a known or presumed metabolite of the following synthetic cannabinoid(s): MMB-CHMICA; MDMB-CHMICA. It may also be a metabolite of other synthetic cannabinoids with similar structures.
4-carboxy-CUMYL-BINACA	ng/mL	4-carboxy-CUMYL-BINACA (CUMYL-BUTINACA N-Butanoic Acid) is a known or presumed metabolite of the following synthetic cannabinoid(s): 4-cyano-CUMYL-BINACA. It may also be a metabolite of other synthetic cannabinoids with similar structures.
4-carboxy-AMB-PINACA	ng/mL	4-carboxy-AMB-PINACA (AB-PINACA N-pentanoic acid) is a known or presumed metabolite of the following synthetic cannabinoid(s): AMB-PINACA(AB-PINACA). It may also be a metabolite of other synthetic cannabinoids with similar structures. Compounds known to interfere with this substance: 5-fluoro-PIC-ACID (5-Fluoro-PB-22 3-Carboxyindole).

NMS Labs
3701 Welsh Road, PO Box 433A
Willow Grove, PA 19090-0437
nms@nmslabs.com

Test Updates

Test Changes

Compound Name	Units	Reference Comment
5-fluoro-PINAC-ACID	ng/mL	5-fluoro-PINAC-ACID (5F-NPB-22-Carboxyindazole) is a known or presumed metabolite of the following synthetic cannabinoid(s): 5-fluoro-EDMB-PINACA; 5-fluoro-MDMB-PINACA (5F-ADB); 5-fluoro-EMB-PINACA (5F-AEB); 5-fluoro-MMB-PINACA (5-fluoro AMB); 5-fluoro-QU-PINAC (5F-NPB-22). It may also be a metabolite of other synthetic cannabinoids with similar structures. Compounds known to interfere with this substance: 5-fluoro-PICA 3,3-dimethylbutanoic acid.
CHMINACA 3,3-dimethylbutanoic acid	ng/mL	CHMINACA 3,3-dimethylbutanoic acid (ADB-CHMINACA 3,3-dimethyl-butanoic acid, MAB-CHMINACA Metabolite) is a known or presumed metabolite of the following synthetic cannabinoid(s): ADMB-CHMINACA (ADB-CHMINACA; MAB-CHMINACA); MDMB-CHMINACA. It may also be a metabolite of other synthetic cannabinoids with similar structures.
5-fluoro-PINACA 3-methylbutanoic acid	ng/mL	5-fluoro-PINACA 3-methylbutanoic acid (5F-AMB 3-methyl-butanoic acid) is a known or presumed metabolite of the following synthetic cannabinoid(s): 5-fluoro-MMB-PINACA (5-fluoro AMB); 5-fluoro-EMB-PINACA (5F-AEB). It may also be a metabolite of other synthetic cannabinoids with similar structures.
5-fluoro-PINACA 3,3-dimethylbutanoic acid	ng/mL	5-fluoro-PINACA 3,3-dimethylbutanoic acid (5F-ADB 3,3-dimethyl-butanoic acid) is a known or presumed metabolite of the following synthetic cannabinoid(s): 5-fluoro-MDMB-PINACA (5F-ADB); 5-fluoro-EDMB-PINACA. It may also be a metabolite of other synthetic cannabinoids with similar structures.

NMS Labs
3701 Welsh Road, PO Box 433A
Willow Grove, PA 19090-0437
nms@nmslabs.com

Test Updates

Test Changes

Compound Name	Units	Reference Comment
FUBINACA 3-methylbutanoic acid	ng/mL	FUBINACA 3-methylbutanoic acid (FUB-AMB 3-methyl-butanoic acid) is a known or presumed metabolite of the following synthetic cannabinoid(s): AMB-FUBINACA (AB-FUBINACA); MMB-FUBINACA (FUB-AMB); EMB-FUBINACA. It may also be a metabolite of other synthetic cannabinoids with similar structures.
FUBINACA 3,3-dimethylbutanoic acid	ng/mL	FUBINACA 3,3-dimethylbutanoic acid (MDMB-FUBINACA 3,3-dimethyl-butanoic acid; MDMB-FUBINACA M1) is a known or presumed metabolite of the following synthetic cannabinoid(s): MDMB-FUBINACA; ADMB-FUBINACA (ADB-FUBINACA). It may also be a metabolite of other synthetic cannabinoids with similar structures. Compounds known to interfere with this substance: Quetiapine.

9562U Synthetic Cannabinoid Metabolites Screen - Expanded (2019 Scope), Urine (Forensic)

Summary of Changes:	Test Name was changed. Scope of Analysis was changed. 5-fluoro-PICA 3,3-dimethylbutanoic acid, CHMINACA-3-methylbutanoic acid, FUBICA 3,3-dimethylbutanoic acid, 5-fluoro-PIC-ACID, CHMIC-ACID, 4-carboxy-CUMYL-BINACA, 4-carboxy-AMB-PINACA, 5-fluoro-PINAC-ACID, CHMINACA 3,3-dimethylbutanoic acid, 5-fluoro-PINACA 3-methylbutanoic acid, 5-fluoro-PINACA 3,3-dimethylbutanoic acid, FUBINACA 3-methylbutanoic acid, FUBINACA 3,3-dimethylbutanoic acid, 4-carboxy-NA-PIM and FUBIC-ACID were added. JWH-018 N-pentanoic acid, UR-144 N-pentanoic acid, AKB48 N-pentanoic acid, AB-FUBINACA oxobutanoic acid, AB-CHMINACA 3-methyl-butanoic acid, PB-22 3-Carboxyindole, 5-Fluoro-PB-22 3-Carboxyindole, BB-22 3-Carboxyindole, ADB-PINACA N-pentanoic acid, AB-PINACA N-pentanoic acid, ADBICA N-pentanoic acid, ADB-CHMINACA 3,3-dimethyl-butanoic acid, 5F-AMB 3-methyl-butanoic acid, 5F-ADB 3,3-dimethyl-butanoic acid, FUB-AMB 3-methyl-butanoic acid and MDMB-FUBINACA 3,3-dimethyl-butanoic acid were removed.
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80307): 4-carboxy-NA-PIM, FUBIC-ACID, 5-fluoro-PICA 3,3-dimethylbutanoic acid, CHMINACA-3-methylbutanoic acid, FUBICA 3,3-dimethylbutanoic acid, 5-fluoro-PIC-ACID, CHMIC-ACID, 4-carboxy-CUMYL-BINACA, 4-carboxy-AMB-PINACA, 5-fluoro-PINAC-ACID, CHMINACA 3,3-dimethylbutanoic acid, 5-fluoro-PINACA 3-methylbutanoic acid, 5-fluoro-PINACA 3,3-dimethylbutanoic acid, FUBINACA 3-methylbutanoic acid, FUBINACA 3,3-dimethylbutanoic acid

Test Updates

Test Changes

Compound Name	Units	Reference Comment
4-carboxy-NA-PIM	ng/mL	
FUBIC-ACID	ng/mL	
5-fluoro-PICA 3,3-dimethylbutanoic acid	ng/mL	
CHMINACA-3-methylbutanoic acid	ng/mL	
FUBICA 3,3-dimethylbutanoic acid	ng/mL	
5-fluoro-PIC-ACID	ng/mL	
CHMIC-ACID	ng/mL	
4-carboxy-CUMYL-BINACA	ng/mL	
4-carboxy-AMB-PINACA	ng/mL	
5-fluoro-PINAC-ACID	ng/mL	
CHMINACA 3,3-dimethylbutanoic acid	ng/mL	
5-fluoro-PINACA 3-methylbutanoic acid	ng/mL	
5-fluoro-PINACA 3,3-dimethylbutanoic acid	ng/mL	
FUBINACA 3-methylbutanoic acid	ng/mL	
FUBINACA 3,3-dimethylbutanoic acid	ng/mL	

4283U Synthetic Cannabinoid Metabolites-Expanded (Qualitative) (2019 Scope), Urine

Summary of Changes: Test Name was changed.
Scope of Analysis was changed.
5-fluoro-PICA 3,3-dimethylbutanoic acid, CHMINACA-3-methylbutanoic acid, FUBICA 3,3-dimethylbutanoic acid, 5-fluoro-PIC-ACID, CHMIC-ACID, 4-carboxy-CUMYL-BINACA, 4-carboxy-AMB-PINACA, 5-fluoro-PINAC-ACID, CHMINACA 3,3-dimethylbutanoic acid, 5-fluoro-PINACA 3-methylbutanoic acid, 5-fluoro-PINACA 3,3-dimethylbutanoic acid, FUBINACA 3-methylbutanoic acid, FUBINACA 3,3-dimethylbutanoic acid, 4-carboxy-NA-PIM and FUBIC-ACID were added.
JWH-018 N-pentanoic acid, UR-144 N-pentanoic acid, AKB48 N-pentanoic acid, AB-FUBINACA oxobutanoic acid, AB-CHMINACA 3-methyl-butanoic acid, PB-22 3-Carboxyindole, 5-Fluoro-PB-22 3-Carboxyindole, BB-22 3-Carboxyindole, ADB-PINACA N-pentanoic acid, AB-PINACA N-pentanoic acid, ADBICA N-pentanoic acid, ADB-CHMINACA 3,3-dimethyl-butanoic acid, 5F-AMB 3-methyl-butanoic acid, 5F-ADB 3,3-dimethyl-butanoic acid, FUB-AMB 3-methyl-butanoic acid and MDMB-FUBINACA 3,3-dimethyl-butanoic acid were removed.

NMS Labs
3701 Welsh Road, PO Box 433A
Willow Grove, PA 19090-0437
nms@nmslabs.com

Test Updates

Test Changes

Scope of Analysis: Method (CPT Code): LC-MS/MS (80352): 4-carboxy-NA-PIM, FUBIC-ACID, 5-fluoro-PICA 3,3-dimethylbutanoic acid, CHMINACA-3-methylbutanoic acid, FUBICA 3,3-dimethylbutanoic acid, 5-fluoro-PIC-ACID, CHMIC-ACID, 4-carboxy-CUMYL-BINACA, 4-carboxy-AMB-PINACA, 5-fluoro-PINAC-ACID, CHMINACA 3,3-dimethylbutanoic acid, 5-fluoro-PINACA 3-methylbutanoic acid, 5-fluoro-PINACA 3,3-dimethylbutanoic acid, FUBINACA 3-methylbutanoic acid, FUBINACA 3,3-dimethylbutanoic acid

Compound Name	Units	Reference Comment
4-carboxy-NA-PIM	ng/mL	4-carboxy-NA-PIM (JWH-018 N-pentanoic acid) is a known or presumed metabolite of the following synthetic cannabinoid(s): NA-PIM (JWH-18). It may also be a metabolite of other synthetic cannabinoids with similar structures.
FUBIC-ACID	ng/mL	FUBIC-ACID (FUB-PB-22-Carboxyindole) is a known or presumed metabolite of the following synthetic cannabinoid(s): ADMB-FUBICA (ADB-FUBICA); NA-FUBIM (FUB-JWH-18); NA-FUBIC (FDU-PB-22); MDMB-FUBICA; MMB-FUBICA. It may also be a metabolite of other synthetic cannabinoids with similar structures.
5-fluoro-PICA 3,3-dimethylbutanoic acid	ng/mL	5-fluoro-PICA 3,3-dimethylbutanoic acid is a known or presumed metabolite of the following synthetic cannabinoid(s): 5-fluoro-MDMB-PICA. It may also be a metabolite of other synthetic cannabinoids with similar structures.
CHMINACA-3-methylbutanoic acid	ng/mL	CHMINACA-3-methylbutanoic acid (AB-CHMINACA 3-methyl-butanoic acid) is a known or presumed metabolite of the following synthetic cannabinoid(s): AMB-CHMINACA (AB-CHMINACA); MMB-CHMINACA (MA-CHMINACA). It may also be a metabolite of other synthetic cannabinoids with similar structures.
FUBICA 3,3-dimethylbutanoic acid	ng/mL	FUBICA 3,3-dimethylbutanoic acid is a known or presumed metabolite of the following synthetic cannabinoid(s): ADMB-FUBICA (ADB-FUBICA); MDMB-FUBICA (5-fluoro AMB). It may also be a metabolite of other synthetic cannabinoids with similar structures.

NMS Labs
3701 Welsh Road, PO Box 433A
Willow Grove, PA 19090-0437
nms@nmslabs.com

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Compound Name	Units	Reference Comment
5-fluoro-PIC-ACID	ng/mL	5-fluoro-PIC-ACID (5-Fluoro-PB-22 3-Carboxyindole) is a known or presumed metabolite of the following synthetic cannabinoid(s): 5-fluoro-MDMB-PICA; 5-fluoro-NA-PIC (NM-221). It may also be a metabolite of other synthetic cannabinoids with similar structures. Compounds known to interfere with this substance: 5-fluoro-PICA 3,3-dimethylbutanoic acid.
CHMIC-ACID	ng/mL	CHMIC-ACID (BB-22 3-Carboxyindole) is a known or presumed metabolite of the following synthetic cannabinoid(s): MMB-CHMICA; MDMB-CHMICA. It may also be a metabolite of other synthetic cannabinoids with similar structures.
4-carboxy-CUMYL-BINACA	ng/mL	4-carboxy-CUMYL-BINACA (CUMYL-BUTINACA N-Butanoic Acid) is a known or presumed metabolite of the following synthetic cannabinoid(s): 4-cyano-CUMYL-BINACA. It may also be a metabolite of other synthetic cannabinoids with similar structures.
4-carboxy-AMB-PINACA	ng/mL	4-carboxy-AMB-PINACA (AB-PINACA N-pentanoic acid) is a known or presumed metabolite of the following synthetic cannabinoid(s): AMB-PINACA(AB-PINACA). It may also be a metabolite of other synthetic cannabinoids with similar structures. Compounds known to interfere with this substance: 5-fluoro-PIC-ACID (5-Fluoro-PB-22 3-Carboxyindole).
5-fluoro-PINAC-ACID	ng/mL	5-fluoro-PINAC-ACID (5F-NPB-22-Carboxyindazole) is a known or presumed metabolite of the following synthetic cannabinoid(s): 5-fluoro-EDMB-PINACA; 5-fluoro-MDMB-PINACA (5F-ADB); 5-fluoro-EMB-PINACA (5F-AEB); 5-fluoro-MMB-PINACA (5-fluoro AMB); 5-fluoro-QU-PINAC (5F-NPB-22). It may also be a metabolite of other synthetic cannabinoids with similar structures.

NMS Labs
3701 Welsh Road, PO Box 433A
Willow Grove, PA 19090-0437
nms@nmslabs.com

Test Updates

Test Changes

Compound Name	Units	Reference Comment
CHMINACA 3,3-dimethylbutanoic acid	ng/mL	CHMINACA 3,3-dimethylbutanoic acid (ADB-CHMINACA 3,3-dimethyl-butanoic acid, MAB-CHMINACA Metabolite) is a known or presumed metabolite of the following synthetic cannabinoid(s): ADMB-CHMINACA (ADB-CHMINACA; MAB-CHMINACA); MDMB-CHMINACA. It may also be a metabolite of other synthetic cannabinoids with similar structures.
5-fluoro-PINACA 3-methylbutanoic acid	ng/mL	5-fluoro-PINACA 3-methylbutanoic acid (5F-AMB 3-methyl-butanoic acid) is a known or presumed metabolite of the following synthetic cannabinoid(s): 5-fluoro-MMB-PINACA (5-fluoro AMB); 5-fluoro-EMB-PINACA (5F-AEB). It may also be a metabolite of other synthetic cannabinoids with similar structures.
5-fluoro-PINACA 3,3-dimethylbutanoic acid	ng/mL	5-fluoro-PINACA 3,3-dimethylbutanoic acid (5F-ADB 3,3-dimethyl-butanoic acid) is a known or presumed metabolite of the following synthetic cannabinoid(s): 5-fluoro-MDMB-PINACA (5F-ADB); 5-fluoro-EDMB-PINACA. It may also be a metabolite of other synthetic cannabinoids with similar structures.
FUBINACA 3-methylbutanoic acid	ng/mL	FUBINACA 3-methylbutanoic acid (FUB-AMB 3-methyl-butanoic acid) is a known or presumed metabolite of the following synthetic cannabinoid(s): AMB-FUBINACA (AB-FUBINACA); MMB-FUBINACA (FUB-AMB); EMB-FUBINACA. It may also be a metabolite of other synthetic cannabinoids with similar structures.
FUBINACA 3,3-dimethylbutanoic acid	ng/mL	FUBINACA 3,3-dimethylbutanoic acid (MDMB-FUBINACA 3,3-dimethyl-butanoic acid; MDMB-FUBINACA M1) is a known or presumed metabolite of the following synthetic cannabinoid(s): MDMB-FUBINACA; ADMB-FUBINACA (ADB-FUBINACA). It may also be a metabolite of other synthetic cannabinoids with similar structures. Compounds known to interfere with this substance: Quetiapine.

NMS Labs
3701 Welsh Road, PO Box 433A
Willow Grove, PA 19090-0437
nms@nmslabs.com

Test Updates

Test Changes

4759SP Valproic Acid - Unbound and Total, Serum/Plasma

Summary of Changes:	Test Name was changed. Specimen Requirements were changed. Stability was changed. Scope of Analysis was changed. Valproic Acid - Unbound was added. Reference Comment was changed. Methods/CPT Codes were changed [LC-MS/MS (80165), LC-MS/MS (80164)] Valproic Acid - Free was removed.

Specimen Requirements:	2 mL Serum or Plasma
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	Serum: Collect sample in Red top tube Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube. Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria:	Polymer gel separation tube (SST or PST).
Stability:	Room Temperature: 14 day(s) Refrigerated: 14 day(s) Frozen (-20 °C): 3 month(s)
Scope of Analysis:	LC-MS/MS (80165): Valproic Acid - Unbound
Method (CPT Code)	LC-MS/MS (80164): Valproic Acid - Total

Compound Name	Units	Reference Comment
Valproic Acid - Unbound	mcg/mL	The unbound fraction of valproic acid ranges from 10% at 40 mcg/mL to 18.5% at 130 mcg/mL.
Valproic Acid - Total	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with valproic acid: 50-100 mcg/mL

52162B Valproic Acid Confirmation, Blood (CSA)

Summary of Changes:	Specimen Requirements were changed. Specimen Requirements (Specimen Container) were changed. Reference Comment was changed. Methods/CPT Codes were changed [LC-MS/MS (80164)]

Test Updates

Test Changes

Specimen Requirements:	1 mL Blood
Transport Temperature:	Refrigerated
Specimen Container:	Lavender top tube (EDTA)
Light Protection:	Not Required
Special Handling:	None
Rejection Criteria:	None
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80164): Valproic Acid

Compound Name	Units	Reference Comment
Valproic Acid	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with valproic acid: 50-100 mcg/mL The blood/plasma concentration ratio for valproic acid is approximately 0.5.

52162FL Valproic Acid Confirmation, Fluid (CSA)

Summary of Changes:	Specimen Requirements were changed. Methods/CPT Codes were changed [LC-MS/MS (80164)]

Specimen Requirements:	2 mL Fluid
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	None
Rejection Criteria:	None
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80164): Valproic Acid

52162SP Valproic Acid Confirmation, Serum/Plasma (CSA)

Summary of Changes:	Specimen Requirements (Special Handling) were changed. Reference Comment was changed. Methods/CPT Codes were changed [LC-MS/MS (80164)]

Test Updates

Test Changes

Specimen Requirements:	1 mL Serum or Plasma
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	Serum: Collect sample in Red top tube Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube. Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria:	Polymer gel separation tube (SST or PST).
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80164): Valproic Acid

Compound Name	Units	Reference Comment
Valproic Acid	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with valproic acid: 50-100 mcg/mL

52162TI Valproic Acid Confirmation, Tissue (CSA)

Summary of Changes:	Methods/CPT Codes were changed [LC-MS/MS (80164)]
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80164): Valproic Acid

52162U Valproic Acid Confirmation, Urine (CSA)

Summary of Changes:	Specimen Requirements (Specimen Container) were changed. Methods/CPT Codes were changed [LC-MS/MS (80164)]
Specimen Requirements:	1 mL Urine
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	None
Rejection Criteria:	None
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80164): Valproic Acid

9552B Valproic Acid Screen (Add-On), Blood (Forensic) (CSA)

Summary of Changes:	Specimen Requirements were changed. Specimen Requirements (Specimen Container) were changed. Reference Comment was changed. Methods/CPT Codes were changed [LC-MS/MS (80307)]

Test Updates

Test Changes

Specimen Requirements:	1 mL Blood
Transport Temperature:	Refrigerated
Specimen Container:	Lavender top tube (EDTA)
Light Protection:	Not Required
Special Handling:	None
Rejection Criteria:	None
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80307): Valproic Acid

Compound Name	Units	Reference Comment
Valproic Acid	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with valproic acid: 50-100 mcg/mL The blood/plasma concentration ratio for valproic acid is approximately 0.5.

9552FL Valproic Acid Screen (Add-On), Fluid (Forensic) (CSA)

Summary of Changes:	Specimen Requirements were changed. Methods/CPT Codes were changed [LC-MS/MS (80307)]

Specimen Requirements:	3 mL Fluid
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	None
Rejection Criteria:	None
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80307): Valproic Acid

9552SP Valproic Acid Screen (Add-On), Serum/Plasma (Forensic) (CSA)

Summary of Changes:	Specimen Requirements were changed. Specimen Requirements (Special Handling) were changed. Reference Comment was changed. Methods/CPT Codes were changed [LC-MS/MS (80307)]

NMS Labs
3701 Welsh Road, PO Box 433A
Willow Grove, PA 19090-0437
nms@nmslabs.com

Test Changes

Specimen Requirements:	1 mL Serum or Plasma
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	Serum: Collect sample in Red top tube Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube. Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria:	Polymer gel separation tube (SST or PST).
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80307): Valproic Acid

Compound Name	Units	Reference Comment
Valproic Acid	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with valproic acid: 50-100 mcg/mL

9552TI Valproic Acid Screen (Add-On), Tissue (Forensic) (CSA)

Summary of Changes:	Methods/CPT Codes were changed [LC-MS/MS (80307)]
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80307): Valproic Acid

9552U Valproic Acid Screen (Add-On), Urine (Forensic) (CSA)

Summary of Changes:	Specimen Requirements were changed. Specimen Requirements (Specimen Container) were changed. Methods/CPT Codes were changed [LC-MS/MS (80307)]
Specimen Requirements:	1 mL Urine
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	None
Rejection Criteria:	None
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80307): Valproic Acid

4757B Valproic Acid, Blood

Summary of Changes:	Specimen Requirements were changed. Specimen Requirements (Specimen Container) were changed. Reference Comment was changed. Methods/CPT Codes were changed [LC-MS/MS (80164)]

Test Updates

Test Changes

Specimen Requirements:	1 mL Blood
Transport Temperature:	Refrigerated
Specimen Container:	Lavender top tube (EDTA)
Light Protection:	Not Required
Special Handling:	None
Rejection Criteria:	None
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80164): Valproic Acid

Compound Name	Units	Reference Comment
Valproic Acid	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with valproic acid: 50-100 mcg/mL The blood/plasma concentration ratio for valproic acid is approximately 0.5.

4757FL Valproic Acid, Fluid

Summary of Changes:	Specimen Requirements were changed. Methods/CPT Codes were changed [LC-MS/MS (80164)]

Specimen Requirements:	2 mL Fluid
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	None
Rejection Criteria:	None
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80164): Valproic Acid

4757SP Valproic Acid, Serum/Plasma

Summary of Changes:	Specimen Requirements (Special Handling) were changed. Reference Comment was changed. Methods/CPT Codes were changed [LC-MS/MS (80164)]

NMS Labs
3701 Welsh Road, PO Box 433A
Willow Grove, PA 19090-0437
nms@nmslabs.com

Test Changes

Specimen Requirements:	1 mL Serum or Plasma
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	Serum: Collect sample in Red top tube Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube. Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria:	Polymer gel separation tube (SST or PST).
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80164): Valproic Acid

Compound Name	Units	Reference Comment
Valproic Acid	mcg/mL	Recommended serum concentration range during anticonvulsant therapy with valproic acid: 50-100 mcg/mL

4757TI Valproic Acid, Tissue

Summary of Changes:	Methods/CPT Codes were changed [LC-MS/MS (80164)]
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80164): Valproic Acid

4761SP Valproic Acid, Unbound, Serum/Plasma

Summary of Changes:	Test Name was changed. Specimen Requirements were changed. Scope of Analysis was changed. Valproic Acid - Unbound was added. Methods/CPT Codes were changed [LC-MS/MS (80165)] Valproic Acid - Free was removed.
Specimen Requirements:	2 mL Serum or Plasma
Transport Temperature:	Refrigerated
Specimen Container:	Plastic container (preservative-free)
Light Protection:	Not Required
Special Handling:	Serum: Collect sample in Red top tube Plasma: Collect sample in Lavender top tube (EDTA) or Pink top tube. Promptly centrifuge and separate Serum or Plasma into a plastic screw capped vial using approved guidelines.
Rejection Criteria:	Polymer gel separation tube (SST or PST).
Scope of Analysis: Method (CPT Code)	LC-MS/MS (80165): Valproic Acid - Unbound

NMS Labs
3701 Welsh Road, PO Box 433A
Willow Grove, PA 19090-0437
nms@nmslabs.com

Test Updates

Test Changes

Compound Name	Units	Reference Comment
Valproic Acid - Unbound	mcg/mL	The unbound fraction of valproic acid ranges from 10% at 40 mcg/mL to 18.5% at 130 mcg/mL.

4757U Valproic Acid, Urine

Summary of Changes: Specimen Requirements (Specimen Container) were changed.
Methods/CPT Codes were changed [LC-MS/MS (80164)]

Specimen Requirements: 1 mL Urine
Transport Temperature: Refrigerated
Specimen Container: Plastic container (preservative-free)
Light Protection: Not Required
Special Handling: None
Rejection Criteria: None
Scope of Analysis: Method (CPT Code) LC-MS/MS (80164): Valproic Acid

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3701 Welsh Road, PO Box 433A
Willow Grove, PA 19090-0437
nms@nmslabs.com

Test Updates

Discontinued Tests

Test Code	Test Name	Alternative Test
52020FL	Chlorzoxazone Confirmation, Fluid	No Alternate Tests Available
52020TI	Chlorzoxazone Confirmation, Tissue	No Alternate Tests Available
52020U	Chlorzoxazone Confirmation, Urine	No Alternate Tests Available
1255U	Chlorzoxazone, Urine	1255SP - Chlorzoxazone, Serum/Plasma
52069B	Mephenytoin and Metabolite Confirmation, Blood	No Alternate Tests Available
52069FL	Mephenytoin and Metabolite Confirmation, Fluid	No Alternate Tests Available
52069SP	Mephenytoin and Metabolite Confirmation, Serum/Plasma	No Alternate Tests Available
52069TI	Mephenytoin and Metabolite Confirmation, Tissue	No Alternate Tests Available
2620SP	Mephenytoin and Metabolite, Serum/Plasma	No Alternate Tests Available
52070B	Mephobarbital and Metabolite Confirmation, Blood	No Alternate Tests Available
52070FL	Mephobarbital and Metabolite Confirmation, Fluid	No Alternate Tests Available
52070SP	Mephobarbital and Metabolite Confirmation, Serum/Plasma	No Alternate Tests Available
52070TI	Mephobarbital and Metabolite Confirmation, Tissue	No Alternate Tests Available
2630B	Mephobarbital and Metabolite, Blood	3580B - Phenobarbital, Blood
2630SP	Mephobarbital and Metabolite, Serum/Plasma	3580SP - Phenobarbital, Serum/Plasma
5644SP	Methsuximide as Metabolite Confirmation, Serum/Plasma	No Alternate Tests Available
9336SP	Methsuximide as Metabolite Screen, Serum/Plasma	2950SP - Methsuximide as Metabolite, Serum/Plasma
3380B	Pemoline, Blood	No Alternate Tests Available
3380SP	Pemoline, Serum/Plasma	No Alternate Tests Available
3751SP	Phenytoin - Total, Serum/Plasma	3743SP - Phenytoin, Serum/Plasma
5673B	Phenytoin Confirmation, Blood	No Alternate Tests Available
5673FL	Phenytoin Confirmation, Fluid	No Alternate Tests Available
5673SP	Phenytoin Confirmation, Serum/Plasma	No Alternate Tests Available
9239B	Phenytoin Screen, Blood	3743B - Phenytoin, Blood
9239FL	Phenytoin Screen, Fluid	3743FL - Phenytoin, Fluid
9239SP	Phenytoin Screen, Serum/Plasma	3743SP - Phenytoin, Serum/Plasma
4760SP	Valproic Acid, Serum/Plasma	4757SP - Valproic Acid, Serum/Plasma

NMS Labs
3701 Welsh Road, PO Box 433A
Willow Grove, PA 19090-0437
nms@nmslabs.com