Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

Update Notes
We now have a limited supply of Aptima® Combo II Urine transport media. If you need media for urine collections for CHGTM, CHRNA, GCRNA, or TRIVA please contact WML Client Services to place an order. Please remember supplies are limited and we will fill your order based on testing volumes.

Update Summary		
New Test Activation	10/27/2020	5INHE - "Factor V Inhib Profile, P"
New Test Activation	10/27/2020	9INHE - "Factor IX Inhib Profile, P"
New Test Activation	11/16/2020	ADDPF - "Adenosine Deaminase, Pericardial Fluid"
New Test Activation	11/16/2020	COCSF - "Coccidioides Ab by CF & ID, CSF"
New Test Activation	10/27/2020	HPDNA - "HPV DNA, High Risk, Cervical with Reflex to Genotypes 16,18"
New Test Activation	10/20/2020	HPVMR - "HPV mRNA E6/E7 with Reflex to HPV Genotypes 16, 18/45"
Update Existing Test	11/16/2020	ADACS - "Adenosine Deaminase, CSF"
Update Existing Test	11/16/2020	ADAPF - "Adenosine Deaminase, Pleural Fluid"
Update Existing Test	11/16/2020	ADAPR - "Adenosine Deaminase, Peritoneal Fluid"
Update Existing Test	11/16/2020	APHF - "pH, Fecal"
Update Existing Test	11/23/2020	ARIX - "Arixtra (Fondaparinux) Level"
Update Existing Test	11/23/2020	BCRPQ - "BCR-ABL1 Gn Rearrange Qnt PCR"
Update Existing Test	11/16/2020	CHLPR - " Chlorpromazine, Serum or Plasma"
Update Existing Test	10/13/2020	COVG - "SARS Coronavirus 2 IgG Antibody"
Update Existing Test	10/13/2020	COVW - "SARS-CoV-2 Qualitative"
Update Existing Test	11/16/2020	CYAN - " CYANIDE, WHOLE BLOOD"
Update Existing Test	10/13/2020	FUKAU - " Ustekinumab Quantitation with Antibodies, Serum"
Update Existing Test	11/23/2020	HEPXA - "Heparin Anti-Xa"
Update Existing Test	11/23/2020	IGVHM - "IgVH Mutation, Cell-Based (CLL)"
Update Existing Test	10/27/2020	IL6 - "Interleukin 6"
Update Existing Test	10/13/2020	LYME - "Borrelia burgdorferi Total IgG/IgM Antibody"
Update Existing Test	11/16/2020	PPR - " Erythrocyte Porphyrin (EP), Whole Blood"
Update Existing Test	11/2/2020	PROPQ - "Propafenone, Serum/Plasma"
Update Existing Test	11/16/2020	THIOC - "Thiocyanate, Serum or Plasma"
Update Existing Test	11/16/2020	UHEMS - "Hemosiderin, Urine"
Update Existing Test	11/16/2020	UMEQG - "Methaqualone by GC/MS Urine"
Update Existing Test	11/2/2020	WAR - "Warfarin, Serum/Plasma"
Inactivate Test With Replacement	11/16/2020	BUPSP - "Bupropion, Serum or Plasma" replaced by BSEPL - "Bupropion and metabolite, S/P"

Inactivate Test With Replacement	11/16/2020	COCID - "Coccidioides Ab (ID)" replaced by COSER - "Coccidioides Ab by CF & ID, Serum"
Inactivate Test With Replacement	10/8/2020	MSI - "Microsatellite Instability (MSI), Tissue" replaced by TMSI - "Microsatellite Instability, Tumor"
Inactivate Test With Replacement	10/27/2020	NMDGR - "N-methyl-D-Aspartate Receptor Ab IgG Serum w Reflex toTiter" replaced by NMETD - "N-methyl-D-Aspartate Rcptr Ab, IgG, Ser"

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

New Test Activation			
Effective Date	10/27/2020		
Name	Factor V Inhib Profile, P		
Code	5INHE		
CPT Code(s)	85220, 85390. Plus 85335 and/or 85390 as appropriate, at additional fees		
Notes	Patient Notes: Patient must not be receiving Coumadin (warfarin) or heparin therapy and patient fasting is preferred.		
Specimen Requirements			
Specimen Required	Draw blood in a light blue 3.2% sodium citrate tube. See appendices for coagulation test collection instructions. Send 3.0 mL plasma (1.0 mL in each vial) frozen in 3 separate screw-capped plastic vials. Minimum volume 2.0 mL in 2 screw-capped plastic vials, 1.0 mL in each.		
Rejection Criteria	Serum, non-frozen or hemolyzed specimens		
Stability	Room temperature: 4 hours; Refrigerated: 4 hours; Frozen: 14 days		
Performing Information			
Methodology	Optical Clot-Based		
Reference Range	See report		
Performed Days	Monday - Friday		
Turnaround Time	2 - 3 days		
Performing Laboratory	Mayo Clinic Laboratories		
Interface Information			
Legacy Code[1]	5INHE		
Interface Order Code	3800209		
Result Code	**Name**	**LOINC Code**	**AOE/Prompt[2]**
3800173	Result	81124-0	No

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

New Test Activation			
Effective Date	10/27/2020		
Name	Factor IX Inhib Profile, P		
Code	9INHE		
CPT Code(s)	85250, 85390, plus 85335 and/or 85390 as appropriate, at additional cost		
Notes	Patient Notes: Patient must not be receiving Coumadin (warfarin) or heparin therapy and patient fasting is preferred.		
Specimen Requirements			
Specimen Required	Draw blood in a light blue 3.2% sodium citrate tube. See appendices for coagulation test collection instructions. Send 3.0 mL plasma (1.0 mL in each vial) frozen in 3 separate screw-capped plastic vials. Minimum volume 2.0 mL in 2 screw-capped plastic vials, 1.0 mL in each.		
Rejection Criteria	Serum, non-frozen or hemolyzed specimens		
Stability	Room temperature: 4 hours; Refrigerated: 4 hours; Frozen: 14 days		
Performing Information			
Methodology	Varies by test		
Reference Range	See report		
Performed Days	Monday - Friday		
Turnaround Time	2 - 3 days		
Performing Laboratory	Mayo Clinic Laboratories		
Interface Information			
Legacy Code[1]	9INHE		
Interface Order Code	3800201		
Result Code	**Name**	**LOINC Code**	**AOE/Prompt[2]**
3800174	Result	Not available	No

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

New Test Activation			
Effective Date	11/16/2020		
Name	Adenosine Deaminase, Pericardial Fluid		
Code	ADDPF		
CPT Code(s)	84311		
Notes			
Specimen Requirements			
Specimen Required	Collect pericardial fluid, centrifuge specimen, and send 0.5 mL fluid (0.2 mL minimum) frozen in a screw-capped plastic vial.		
Rejection Criteria	Whole blood Bronchoalveolar lavage		
Stability	Room temperature: 24 hours; Refrigerated: 1 week; Frozen: 30 days		
Performing Information			
Methodology	Quantitative Spectrophotometry		
Reference Range	0.0 - 40.0 U/L		
Performed Days	Sunday, Tuesday, Thursday		
Turnaround Time	3 - 6 days		
Performing Laboratory	ARUP Reference Laboratory		
Interface Information			
Legacy Code[1]	ADDPF		
Interface Order Code	3600193		
Result Code	**Name**	**LOINC Code**	**AOE/Prompt[2]**
3600193	Adenosine Deaminase, Pericardial Fluid	49760-2	No

Warde Medical Laboratory

LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT
WX0000003039 M 12/05/1988 31 Y

Referral Testing

Collected: 10/13/2020 16:45 Received: 10/13/2020 16:45

Test Name	Result	Flag	Ref-Ranges	Units	Site
Adenosine Deaminase, Pericardial Fluid	**45**	**AB**	U/L	U/L	ARRL

INTERPRETIVE INFORMATION:Adenosine Deaminase, Pericardial Fluid
Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement B: aruplab.com/CS
Performed by ARUP Laboratories,
500 Chipeta Way, SLC,UT 84108 800-522-2787
www.aruplab.com, Tracy I. George, MD - Lab. Director

Performing Site:
ARRL: ARUP REFERENCE LAB 500 Chipeta Way Salt Lake City UT 841081221

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

B813000000
WX0000003039
Printed D&T: 10/13/20 16:46

Ordered By: CLIENT CLIENT
WX00000000001595

William G. Finn, M.D. - Medical Director
Form: MM RL1

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

New Test Activation			
Effective Date	11/16/2020		
Name	Coccidioides Ab by CF & ID, CSF		
Code	COCSF		
CPT Code(s)	86635 x 2		
Notes			
Specimen Requirements			
Specimen Required	Collect CSF and send 2.5 mL fluid (1.0 mL minimum) refrigerated in a screw-capped plastic vial.		
Rejection Criteria	Other body fluids, contaminated, hemolyzed, xanthochromic, or severely lipemic specimens.		
Stability	Room temperature: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year		
Performing Information			
Methodology	Semi-Quantitative Complement Fixation/Qualitative Immunodiffusion		
Reference Range	See report		
Performed Days	Sunday - Saturday		
Turnaround Time	3 - 7 days		
Performing Laboratory	ARUP Reference Laboratory		
Interface Information			
Legacy Code[1]	COCSF		
Interface Order Code	3600201		
Result Code	**Name**	**LOINC Code**	**AOE/Prompt[2]**
3600197	Coccidioides by Immunodiffusion, CSF	21209-2	No
3600198	Coccidioides Ab by CF, CSF	13917-0	No

Warde Medical Laboratory

LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT
WX0000003039 M 12/05/1988 31 Y

Referral Testing

Collected: 10/13/2020 16:48 Received: 10/13/2020 16:48

Test Name	Result	Flag	Ref-Ranges	Units	Site
Coccidioides Ab by CF & ID, CSF					
Coccidioides by Immunodiffusion, CSF	**Detected**	**AB**	None Detected		ARRL

INTERPRETIVE INFORMATION: Coccidioides by Immunodiffusion, CSF

Coccidioides infection is demonstrated by the detection of IgM antibody to the Immunodiffusion Tube Precipitin (IDTP) antigen. IgM antibody may be detected 1 to 3 weeks after the onset of primary infection and may suggest active or recent infection. IgM antibody is rarely detected 6 months after infection but may reappear with relapse and may persist in disseminated cases.

IgG antibody may also be demonstrated in response to the Immunodiffusion Complement Fixation (IDCF) antigen and may represent active or past infection. Negative fungal serology does not rule out current infection.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement B: aruplab.com/CS

Coccidioides Ab by CF, CSF	**1:2**	**AB**	<1:2		ARRL

INTERPRETIVE INFORMATION: Coccidioides Ab by Complement Fixation (CF)

Any titer suggests past or current infection. However, greater than 30 percent of cases with chronic residual pulmonary disease have negative Complement Fixation (CF) tests. Titers of less than 1:32 (even as low as 1:2) may indicate past infection or self-limited disease; anticoccidiodal CF antibody titers in excess of 1:16 may indicate disseminated infection. CF serology may be used to follow therapy. Antibody in CSF is considered diagnostic for coccidioidal meningitis, although 10 percent of patients with coccidioidal meningitis will not have antibody in CSF.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.
Performed by ARUP Laboratories,
500 Chipeta Way, SLC,UT 84108 800-522-2787
www.aruplab.com, Tracy I. George, MD - Lab. Director

Warde Medical Laboratory

LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT
WX0000003039 M 12/05/1988 31 Y

Performing Site:
ARRL: ARUP REFERENCE LAB 500 Chipeta Way Salt Lake City UT 841081221

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

B813000001
WX0000003039
Printed D&T: 10/13/20 16:54

Ordered By: CLIENT CLIENT
WX00000000001595

William G. Finn, M.D. - Medical Director
Form: MM RL1

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

New Test Activation			
Effective Date	10/27/2020		
Name	HPV DNA, High Risk, Cervical with Reflex to Genotypes 16,18		
Code	HPDNA		
CPT Code(s)	87624, plus 87625 if reflexed, at an additional fee		
Notes			
Specimen Requirements			
Specimen Required	Send 4.0 mL PreservCyt® fluid collected in a Liquid Cytology PreservCyt® Preservative (ThinPrep®). Minimum volume 2.0 mL.		
Alternate Specimen	2.0 mL SurePath™ fluid (1.0 mL minimum) collected in TriPath SurePath™ vials - post processing of the PAP smear.		
Rejection Criteria	Cervical swabs in Digene® HC cervical sampler, unprocessed Cytyc® media without cervical brush/broom, Swabs, Digene® vials, SurePath™ pellet, samples treated with acetic acid, Vaginal sources, Biopsy		
Stability	**ThinPrep®** Room temperature: 6 months; Refrigerated: 6 months; Frozen: Unacceptable **SurePath™** Room temperature: 28 days; Refrigerated: 6 months; Frozen: Unacceptable		
Performing Information			
Methodology	Real-Time Polymerase Chain Reaction (PCR)		
Reference Range	HPV DNA, High Risk: Not detected HPV 16: Not detected HPV 18: Not detected		
Performed Days	Tuesday - Saturday		
Turnaround Time	6 – 9 days		
Performing Laboratory	Quest SJC		
Interface Information			
Legacy Code[1]	HPDNA		
Interface Order Code	3400409		
Result Code	**Name**	**LOINC Code**	**AOE/Prompt[2]**
3400409	HPV DNA, High Risk, Cervical	82675-0	No

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

New Test Activation			
Effective Date	10/20/2020		
Name	HPV mRNA E6/E7 with Reflex to HPV Genotypes 16, 18/45		
Code	HPVMR		
CPT Code(s)	87624, plus 87625 if reflexed, at an additional fee		
Notes			
Specimen Requirements			
Specimen Required	Send 5.0 mL liquid cytology (PreservCyt®) preservative Thin Prep® in APTIMA® vaginal collection kit (orange label) or APTIMA® specimen transfer tube (green label). Minimum volume 1.0 mL.		
Alternate Specimen	ThinPrep® vial		
Rejection Criteria	Cervical swabs in Digene® HC Cervical Sampler, Digene® vials, swabs, SurePath® Vials, Received frozen		
Stability	Room temperature: 30 days; Refrigerated: 90 days; Frozen: Unacceptable		
Performing Information			
Methodology	Transcription Mediated Amplification (TMA)		
Reference Range	See report		
Performed Days	Tuesday, Thursday, Saturday		
Turnaround Time	5 - 8 days		
Performing Laboratory	Quest SJC		
Interface Information			
Legacy Code[1]	HPVMR		
Interface Order Code	3400359		
Result Code	**Name**	**LOINC Code**	**AOE/Prompt[2]**
3400360	HPV MRNA E6/E7 Reflex to Genotypes 1, 18/45	69002-4	No
3400361	HPV 16 RNA	77399-4	No
3400362	HPV 18/45 RNA	75694-0	No

Warde Medical Laboratory

LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT
WX0000003039 M 12/05/1988 31 Y

Referral Testing

Collected: 10/13/2020 16:55 Received: 10/13/2020 16:55

Test Name	Result	Flag	Ref-Ranges	Units	Site

HPV mRNA E6/E7 with Reflex to HPV Genotypes 16, 18/45

HPV MRNA E6/E7 Reflex to Genotypes 1, 18/45	NOT DETECTED				QCRL

```
REFERENCE RANGE:
     HPV mRNA E6/E7: NOT DETECTED

Methodology:  Transcription-Mediated Amplification

This assay detects E6/E7 viral messenger RNA (mRNA)
from 14 high-risk HPV types (16, 18, 31, 33, 35, 39,
45, 51, 52, 56, 58, 59, 66, 68).

For additional information, please refer to
http://education.questdiagnostics.com/faq/FAQ129v1
(This link is being provided for informational/
educational purposes only.)

The analytical performance characteristics of this
assay have been determined by Quest Diagnostics
Infectious Disease, Inc. The modifications have not
been cleared or approved by the FDA. This assay has
been validated pursuant to the CLIA regulations and
is used for clinical purposes.


Test Performed at:
Quest Diagnostics Infectious Disease, Inc.
33608 Ortega Highway
San Juan Capistrano, CA  92675-2042     H J Batterman MD
```

HPV 16 RNA	.TNP				QCRL
HPV 18/45 RNA	.TNP				QCRL

Performing Site:
QCRL: QUEST DIAGNOSTICS REFERENCE LAB CAPISTRANO 33608 Ortega Highway San Juan Capistrano CA 92675

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

B813000002
WX0000003039
Printed D&T: 10/13/20 17:12

Ordered By: CLIENT CLIENT
WX00000000001595

William G. Finn, M.D. - Medical Director
Form: MM RL1

Warde Medical Laboratory

LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT
WX0000003039 M 12/05/1988 31 Y

Referral Testing

Collected: 10/13/2020 17:13 Received: 10/13/2020 17:13

Test Name	Result	Flag	Ref-Ranges	Units	Site
HPV mRNA E6/E7 with Reflex to HPV Genotypes 16, 18/45					
HPV MRNA E6/E7 Reflex to Genotypes 1, 18/45	**DETECTED**	**AB**			QCRL

REFERENCE RANGE:
HPV mRNA E6/E7: NOT DETECTED

Methodology: Transcription-Mediated Amplification

This assay detects E6/E7 viral messenger RNA (mRNA) from 14 high-risk HPV types (16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, 68).

For additional information, please refer to http://education.questdiagnostics.com/faq/FAQ129v1 (This link is being provided for informational/ educational purposes only.)

The analytical performance characteristics of this assay have been determined by Quest Diagnostics Infectious Disease, Inc. The modifications have not been cleared or approved by the FDA. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

Test Performed at:
Quest Diagnostics Infectious Disease, Inc.
33608 Ortega Highway
San Juan Capistrano, CA 92675-2042 H J Batterman MD

HPV 16 RNA	**DETECTED**	**AB**			QCRL
HPV 18/45 RNA	**DETECTED**	**AB**			QCRL

REFERENCE RANGE:
HPV 16 RNA: NOT DETECTED
HPV 18/45 RNA: NOT DETECTED

Methodology: Transcription Mediated Amplification

The analytical performance characteristics of this assay have been determined by Quest Diagnostics Infectious Disease. The modifications have not been cleared or approved by the FDA. This assay has been validated pursuant to the CLIA regulations and is

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT
WX0000003039 M 12/05/1988 31 Y

Referral Testing

Collected: 10/13/2020 17:13 Received: 10/13/2020 17:13

Test Name	Result	Flag	Ref-Ranges	Units	Site

used for clinical purposes.

Test Performed at:
Quest Diagnostics Infectious Disease, Inc.
33608 Ortega Highway
San Juan Capistrano, CA 92675-2042 H J Batterman MD

Performing Site:
QCRL: QUEST DIAGNOSTICS REFERENCE LAB CAPISTRANO 33608 Ortega Highway San Juan Capistrano CA 92675

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

Update Existing Test	
Effective Date	11/16/2020
Name	Adenosine Deaminase, CSF
Code	ADACS
Interface Order Code	3619540
Legacy Code	ADACSF
Notes	Updates to volume requirements, stability and reference range.
Required Testing Changes	
Specimen Required	Collect CSF and send **0.5 mL fluid** (**0.2 mL minimum)** frozen in a screw-capped plastic vial.
Stability	Room temperature: **24 hours**; Refrigerated: 7 days; Frozen: 1 month
Reference Range	**0.0 - 9.0 U/L**

Update Existing Test	
Effective Date	11/16/2020
Name	Adenosine Deaminase, Pleural Fluid
Code	ADAPF
Interface Order Code	3619500
Legacy Code	ADAPF
Notes	Updates to volume requirements, stability and reference range.
Required Testing Changes	
Specimen Required	Collect pleural fluid and send **0.5 mL** fluid (**0.2 mL** minimum) frozen in a screw-capped plastic vial.
Stability	Room temperature: **24 hours**; Refrigerated: 7 days; Frozen: 1 month
Reference Range	**0.0 - 30.0 U/L**

Update Existing Test	
Effective Date	11/16/2020
Name	Adenosine Deaminase, Peritoneal Fluid
Code	ADAPR
Interface Order Code	3619520
Legacy Code	ADAPER
Notes	Update to volume requirements, stability and reference range.
Required Testing Changes	
Specimen Required	Collect peritoneal fluid and send **0.5 mL** fluid (**0.2 mL minimum)** frozen in a screw-capped plastic vial.
Stability	Room temperature: **24 hours**; Refrigerated: 7 days; Frozen: 1 month
Reference Range	**0.0 - 30.0 U/L**

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

Update Existing Test	
Effective Date	11/16/2020
Name	pH, Fecal
Code	APHF
Interface Order Code	3621040
Legacy Code	APHF
Notes	Updates to rejection criteria and stability requirements.
Required Testing Changes	
Rejection Criteria	Diapers, specimens in media or preservative, specimens containing barium, **grossly bloody specimens**
Stability	Room temperature: 1 hour; Refrigerated: **14 days**; Frozen: 7 days

Update Existing Test	
Effective Date	11/23/2020
Name	Arixtra (Fondaparinux) Level
Code	ARIX
Interface Order Code	3423100
Legacy Code	ARIXQ
Notes	Updates to stability requirements.
Required Testing Changes	
Stability	**Room temperature: Unacceptable; Refrigerated: Unacceptable;** Frozen: 21 days

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

Update Existing Test	
Effective Date	11/23/2020
Name	BCR-ABL1 Gn Rearrange Qnt PCR
Code	BCRPQ
Interface Order Code	3514960
Legacy Code	BCRPQ
Notes	Updates to volume requirements, alternate specimen, performed and turnaround times.
Required Testing Changes	
Specimen Required	Draw blood in a lavender EDTA tube. Send **5.0 mL** whole blood (**3.0 mL minimum**) refrigerated in original collection tube. *Due to 72 hour stability samples must arrive at Warde Medical Laboratory the day of collection or within 18 hours of collection*. **Ship to Warde Sunday through Thursday only**.
Alternate Specimen	Bone marrow: EDTA, 3.0 mL, Sodium heparin, or ACD B **Whole blood: Sodium heparin**
Performed Days	**Sunday - Saturday**
Turnaround Time	**5 - 7 days**
Reference Range	**See report**

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

Update Existing Test			
Effective Date	11/16/2020		
Name	Chlorpromazine (Thorazine)		
Code	CHLPR		
Interface Order Code	3500800		
Legacy Code	CHLPR		
Notes	**New website entry**, including test name and component name changes.		
Required Testing Changes			
CPT Code(s)	80342 (G0480)		
Specimen Requirements			
Name	**Chlorpromazine, Serum or Plasma**		
Specimen Required	Draw blood in a plain red-top tube. Centrifuge, remove serum from cells and send 2.0 mL serum (0.5 mL minimum) frozen in a screw-capped plastic vial.		
Alternate Specimen	Plasma: EDTA, sodium heparin, potassium oxalate or sodium fluoride		
Stability	Room temperature: Unacceptable; Refrigerated: 14 days; Frozen: 14 days		
Performing Information			
Methodology	Quantitative Liquid Chromatography – Tandem Mass Spectrometry		
Reference Range	Therapeutic Range: 30 – 300 ng/mL Toxic Level: ≥ 600 ng/mL		
Performed Days	Monday		
Turnaround Time	9 - 11 days		
Performing Laboratory	ARUP Reference Laboratories		
Result Code	**Name**	**LOINC Code**	**AOE/Prompt²**
3500800	**Chlorpromazine, Serum or Plasma**	3471-0	No

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

Update Existing Test	
Effective Date	10/13/2020
Name	SARS Coronavirus 2 IgG Antibody
Code	COVG
Interface Order Code	3000226
Legacy Code	COVG
Notes	Update LOINC codes.

Required Testing Changes			
Result Code	**Name**	**LOINC Code**	**AOE/Prompt²**
3000227	First Test? (Y/N/U)	95417-2	**Yes**
3000228	Employed in healthcare? (Y/N/U)	95418-0	**Yes**
3000229	Symptomatic as defined by CDC? (Y/N/U)	95419-8	**Yes**
3000231	If yes, then Date of Symptom Onset yyyymmdd	**11368-5**	**Yes**
3000233	Hospitalized? (Y/N/U)	**71477-4**	**Yes**
3000237	ICU? (Y/N/U)	95420-6	**Yes**
3000239	Resident in a congregate care setting? (Y/N/U)	95421-4	**Yes**
3000241	Pregnant? (Y/N/U)	82810-3	**Yes**
3000242	SARS Coronavirus 2 IgG Ab	Not available	No
3000243	SARS Coronavirus 2 IgG Ab Interpretation	94563-4	No

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

Update Existing Test			
Effective Date	10/13/2020		
Name	SARS-CoV-2 Qualitative		
Code	COVW		
Interface Order Code	3000089		
Legacy Code	COVW		
Notes	Update volume requirements and LOINC codes.		
Required Testing Changes			
Specimen Required	One nasopharyngeal swab sent frozen in **3.0 mL** viral transport media (**1.0 mL minimum**).		
Result Code	**Name**	**LOINC Code**	**AOE/Prompt²**
3000091	First Test? (Y/N/U)	95417-2	**Yes**
3000092	Employed in healthcare? (Y/N/U)	95418-0	**Yes**
3000093	Symptomatic as defined by CDC? (Y/N/U)	95419-8	**Yes**
3000094	if yes, then Date of Symptom Onset yyyymmdd	**11368-5**	**Yes**
3000096	Hospitalized? (Y/N/U)	**71477-4**	**Yes**
3000097	ICU? (Y/N/U)	95420-6	**Yes**
3000098	Resident in a congregate care setting? (Y/N/U)	95421-4	**Yes**
3000099	Pregnant? (Y/N/U)	82810-3	**Yes**
3000066	SARS-CoV-2 Qual RT PCR	94500-6	No

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

Update Existing Test			
Effective Date	11/16/2020		
Name	Cyanide		
Code	CYAN		
Interface Order Code	3680540		
Legacy Code	CYANAR		
Notes	Various updates including test name and result component changes.		
Required Testing Changes			
Name	**CYANIDE, WHOLE BLOOD**		
Specimen Required	Draw blood in a gray top tube (sodium fluoride/Potassium Oxalate). Send 1.0 mL whole blood (0.4 mL minimum) **CRITICAL FROZEN**		
Alternate Specimen	**No alternate specimens.**		
Stability	**Room temperature: Undetermined; Refrigerated: 24 hours; Frozen: 3 months**		
Methodology	**Quantitative High Performance Liquid Chromatography/Tandem Mass Spectrometry**		
Reference Range	**See report**		
Performed Days	**Varies**		
Turnaround Time	**10 - 14 days**		
Result Code	**Name**	**LOINC Code**	**AOE/Prompt²**
3680540	**Cyanide, Whole Blood**	5634-1	No

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

Update Existing Test			
Effective Date	10/13/2020		
Name	Ustekinumab and Anti-Ustek Antibody, Serum		
Code	FUKAU		
Interface Order Code	3800208		
Legacy Code	FUKAU		
Notes	Various updates to specimen requirements including test name change and component name changes.		
Required Testing Changes			
Name	**Ustekinumab Quantitation with Antibodies, Serum**		
CPT Code(s)	80299 (Ustekinumab); **83520 (Anti-Ustekinumab Antibody)**		
Specimen Required	Patient Preperation: Collect immediately before next dose of drug administration. Draw blood in a plain red-top tube. Centrifuge, separate serum from cells and send **0.5 mL** serum (**0.4 mL minimum**) refrigerated in a screw-capped plastic vial.		
Stability	**Room temperature: Unacceptable; Refrigerated: 21 days; Frozen: 21 days**		
Methodology	**Enzyme-linked Immunosorbent Assay (ELISA)**		
Performed Days	**Tuesday, Friday**		
Turnaround Time	**3 - 6 days**		
Result Code	**Name**	**LOINC Code**	**AOE/Prompt[2]**
3800117	**Ustekinumab QN, S**	87408-1	No
3800118	**Ustekinumab Ab, S**	**87409-9**	No

Update Existing Test	
Effective Date	11/23/2020
Name	Heparin Anti-Xa
Code	HEPXA
Interface Order Code	3424250
Legacy Code	HEPXAQ
Notes	Update to stability.
Required Testing Changes	
Stability	Room temperature: 14 days; Refrigerated: 14 days; **Frozen: 21 days**

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

Update Existing Test	
Effective Date	11/23/2020
Name	IgVH Mutation, Cell-Based (CLL)
Code	IGVHM
Interface Order Code	3400089
Legacy Code	
Notes	
Required Testing Changes	
Specimen Required	Draw blood in a lavender EDTA. Send **5.0 mL** whole blood (**3.0 mL minimum**) refrigerated in original collection tube. **Due to 72 hour stability samples must arrive at Warde Medical Laboratory the day of collection, or within 18 hours of collection. Send Sunday through Thursday only.**
Alternate Specimen	Whole blood: Sodium heparin **Bone Marrow 3.0 mL EDTA**
Performed Days	**Sunday - Saturday**
Turnaround Time	**8 - 10 days**

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

Update Existing Test	
Effective Date	10/27/2020
Name	Interleukin 6
Code	IL6
Interface Order Code	3000067
Legacy Code	IL6
Notes	Updates to reference range, rejection criteria and report.
Required Testing Changes	
Rejection Criteria	Plasma, **moderate hemolysis, gross lipemia**
Reference Range	**< 6.4**

Warde Medical Laboratory

LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT
WX0000003039 M 12/05/1988 31 Y

Immunochemistry

Collected: 10/13/2020 17:15 Received: 10/13/2020 17:15

Test Name	Result	Flag	Ref-Ranges	Units	Site
Interleukin 6	**65.0**	**H**	<6.4	pg/mL	WMRL

This test was performed using the Beckman Coulter Access IL-6 assay, which has been granted Emergency Use Authorization (EUA) by FDA, and is intended for use to assist in identifying severe inflammatory response in patients with confirmed COVID-19 illness to aid in determining the risk of intubation with mechanical ventilation, in conjunction with clinical findings and the results of other laboratory testing. The reference range for this assay is <6.4 pg/mL. PCR-confirmed COVID-19 patients that have Access IL-6 concentrations >35 pg/mL at presentation are at increased risk for intubation with mechanical ventilation during their hospitalization. Normal IL-6 results do not preclude development of a severe inflammatory response, and IL-6 should not be used as the sole basis for patient management decisions. Results must be combined with clinical observations, patient history, other laboratory parameters, and epidemiological information. FDA requires that fact sheets regarding this assay be provided to patients and healthcare workers.

A fact sheet for patients is available at the following URL:
http://www.wardelab.com/Beckman_IL6_Fact_Sheet_for_Patients.pdf

A fact sheet for healthcare providers is available at the following URL:
http://www.wardelab.com/Beckman_IL6_Fact_Sheet_for_HCP.pdf

Performing Site:
WMRL: WARDE MEDICAL LABORATORY 300 West Textile Road Ann Arbor MI 48108

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

B813000004
WX0000003039
Printed D&T: 10/13/20 17:15

Ordered By: CLIENT CLIENT
WX00000000001595

William G. Finn, M.D. - Medical Director
Form: MM RL1

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

Update Existing Test	
Effective Date	10/13/2020
Name	Borrelia burgdorferi Total IgG/IgM Antibody
Code	LYME
Interface Order Code	3007580
Legacy Code	LYME
Notes	Updated alternative specimens.
Required Testing Changes	
Alternate Specimen	**Plasma: EDTA, Lithium heparin**

Update Existing Test			
Effective Date	11/16/2020		
Name	Protoporphyrin-RBC		
Code	PPR		
Interface Order Code	3423780		
Legacy Code	PPRQ		
Notes	Various updates to specimen requirements including test name and result component change. This test will now be performed at ARUP Reference Laboratory.		
Required Testing Changes			
Name	**Erythrocyte Porphyrin (EP), Whole Blood**		
Specimen Required	Draw blood in a lavender EDTA tube. Send **1.0 mL** whole blood (0.5 mL minimum) refrigerated in a screw-capped plastic vial. **PROTECT FROM LIGHT.**		
Alternate Specimen	**Whole blood: Dark blue EDTA, tan EDTA**		
Rejection Criteria	Clotted samples, hemolysis, **specimens not collected in EDTA**		
Stability	**Room temperature: Unacceptable; Refrigerated: 14 days; Frozen: 28 days**		
Methodology	**Fluorometry**		
Reference Range	**0.0 - 35.0 ug/dL**		
Performed Days	**Monday, Wednesday, Friday**		
Performing Laboratory	**ARUP Reference Laboratory**		
Result Code	**Name**	**LOINC Code**	**AOE/Prompt[2]**
3423780	**Erythrocyte Porphyrin (EP)**	2898-5	No

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

Update Existing Test	
Effective Date	11/2/2020
Name	Propafenone, Serum/Plasma
Code	PROPQ
Interface Order Code	3600079
Legacy Code	
Notes	Updates to stability.
Required Testing Changes	
Stability	**Room temperature: 30 days; Refrigerated: 30 days; Frozen: 15 months**

Update Existing Test	
Effective Date	11/16/2020
Name	Thiocyanate, Serum or Plasma
Code	THIOC
Interface Order Code	3600033
Legacy Code	
Notes	Updates to minimum volume, stability, reference range, performed and TAT.
Required Testing Changes	
Specimen Required	Draw blood in a plain red-top tube. Centrifuge, separate serum from cells within 2 hours, and send 1.0 mL serum (**0.3 mL minimum**) refrigerated in a screw-capped plastic vial.
Stability	**Room temperature: 28 days; Refrigerated: 28 days; Frozen: 28 days**
Reference Range	**See report**
Performed Days	**Varies**
Turnaround Time	**10 - 13 days**

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

Update Existing Test	
Effective Date	11/16/2020
Name	Hemosiderin, Urine
Code	UHEMS
Interface Order Code	3680770
Legacy Code	UHEMSIDAR
Notes	Updates to volume requirements, methodology, stability and reference range.
Required Testing Changes	
Specimen Required	Collect first morning urine. Mix well and sen**d 4.0 mL** unpreserved urine (1.0 mL minimum) frozen in a screw-capped plastic
Methodology	**Qualitative microscopy**
Reference Range	**Absent**

Update Existing Test	
Effective Date	11/16/2020
Name	Methaqualone by GC/MS Urine
Code	UMEQG
Interface Order Code	3423020
Legacy Code	UMETHAQ
Notes	Updates to methodology.
Required Testing Changes	
Methodology	**Chromatography Mass Spectrometry**

Update Existing Test	
Effective Date	11/2/2020
Name	Warfarin, Serum/Plasma
Code	WAR
Interface Order Code	3511200
Legacy Code	WAR
Notes	Updates to stability.
Required Testing Changes	
Stability	**Room temperature: 30 days; Refrigerated: 30 days; Frozen: 15 months**

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

Inactivate Test With Replacement			
Effective Date	11/16/2020		
Inactivated Test			
Name	Bupropion, Serum or Plasma		
Code	BUPSP		
Legacy Code[1]	BUPSP		
Interface Order Code	3600034		
Notes			
Replacement Test			
Name	Bupropion and Metabolite, S/P		
Code	BSEPL		
CPT Code(s)	80338 (G0480)		
Notes			
Specimen Requirements			
Specimen Required	Draw blood in a plain red-top tube. Contrifuge, separate serum from cells and freeze within 2 hours. Send 2.0 mL (**0.5 minimum**) frozen in a screw-capped plastic vial. **CRITICAL FROZEN.**		
Alternate Specimen	Plasma: Lavender EDTA; **sodum heparin, potassium oxalate or sodium fluoride.**		
Rejection Criteria	SST tube, sodium citrate, ACD B, whole blood		
Stability	Room temperature: Unacceptable; Refrigerated: Unacceptable; Frozen: 14 days		
Performing Information			
Methodology	Quantitative Liquid Chromatography - Tandem Mass Spectrometry		
Reference Range	**Bupropion:** Therapeutic Range: 10 - 100 ng/mL Toxic Level: ≥ 400 ng/mL **Hydroxybuproprion:** Therapeutic Range: 850 - 1500 ng/mL Toxic Level: ≥ 2000 ng/mL		
Performed Days	Monday		
Turnaround Time	9 - 11 days		
Performing Laboratory	ARUP Reference Laboratory		
Interface Information			
Legacy Code[1]	BSEPL		
Interface Order Code	3600194		
Result Code	**Name**	**LOINC Code**	**AOE/Prompt[2]**
3600195	Bupropion	6706-6	No
3600196	Hydroxybupropion	9418-5	No

Warde Medical Laboratory

LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT
WX0000003039 M 12/05/1988 31 Y

Referral Testing

Collected: 10/13/2020 17:16 Received: 10/13/2020 17:16

Test Name	Result	Flag	Ref-Ranges	Units	Site
Bupropion and metabolite, S/P					
Bupropion	**105**	**AB**	10-100	ng/mL	ARRL

INTERPRETIVE INFORMATION: Bupropion and Metabolite, Serum or Plasma
Therapeutic Range:
10- 100 ng/mL
Toxic: Greater than or equal to 400 ng/mL

Bupropion is an antidepressant drug indicated for the treatment of major depressive disorder. The drug is also used as treatment for smoking cessation. The therapeutic range is based on serum pre-dose (trough) draw at steady-state concentration. Bupropion is primarily metabolized to hydroxybupropion, which has about 50% of the activity of the parent drug. The pharmacokinetics of bupropion and metabolite are influenced by drug-drug interactions that affect CYP2B6 metabolism. Patients with renal or hepatic impairment may require a dose reduction. Adverse effects may include seizures, hypertension, nausea, vomiting, neuropsychiatric and cardiac abnormalities.

See Compliance Statement B: www.aruplab.com/CS

Hydroxybupropion	**1655**	**AB**	850-1500	ng/mL	ARRL

INTERPRETIVE INFORMATION: Bupropion and Metabolite, Serum or Plasma
Therapeutic Range:
850-1500 ng/mL
Toxic: Greater than or equal to 2000 ng/mL

Performing Site:
ARRL: ARUP REFERENCE LAB 500 Chipeta Way Salt Lake City UT 841081221

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

B813000005
WX0000003039
Printed D&T: 10/13/20 17:18

Ordered By: CLIENT CLIENT
WX00000000001595

William G. Finn, M.D. - Medical Director
Form: MM RL1

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

Inactivate Test With Replacement			
Effective Date	11/16/2020		
Inactivated Test			
Name	Coccidioides Ab (ID)		
Code	COCID		
Legacy Code[1]	COCABIDARP		
Interface Order Code	3680490		
Notes	For CSF sample type, suggested replacement is COCSF.		
Replacement Test			
Name	Coccidioides Ab by CF & ID, Serum		
Code	COSER		
CPT Code(s)	86635 x 2		
Notes			
Specimen Requirements			
Specimen Required	Draw blood in a SST. Centrifuge, separate serum from cells ASAP or within 2 hours of collection. Send 2.0 mL serum (0.6 mL minimum) refrigerated in a screw-capped plastic vial.		
Alternate Specimen			
Rejection Criteria	Other body fluids. Hemolyzed, icteric, or lipemic specimens		
Stability	Room temperature; 48 hours; Refrigerated: 2 weeks; Frozen: 1 year		
Performing Information			
Methodology	Semi-quantitative Complement Fixation/Qualitative Immunodiffusion		
Reference Range	Coccidioides Antibody by CF: < 1:2 Coccidioides immitis Antibodies by ID: None detected		
Performed Days	Sunday – Saturday		
Turnaround Time	4 - 8 days		
Performing Laboratory	ARUP Reference Laboratory		
Interface Information			
Legacy Code[1]	COSER		
Interface Order Code	3600202		
Result Code	**Name**	**LOINC Code**	**AOE/Prompt[2]**
3600199	Coccidioides Immitis Abs, Preciptin	5095-5	No
3600200	Coccidioides Antibody by CF	33380-7	No

Warde Medical Laboratory

LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
Ann Arbor MI 48108

EXAMPLE, REPORT
WX0000003039 M 12/05/1988 31 Y

Referral Testing

Collected: 10/13/2020 17:19 Received: 10/13/2020 17:19

Test Name	Result	Flag	Ref-Ranges	Units	Site
Coccidioides Ab by CF & ID, Serum					
Coccidioides Immitis Abs, Preciptin	**Detected**	**AB**	None Detected		ARRL

INTERPRETIVE INFORMATION: Coccidioides immitis Antibodies by
Immunodiffusion

Coccidioides infection is demonstrated by the detection of IgM antibody to the Immunodiffusion Tube Precipitin (IDTP) antigen. IgM antibody may be detected 1 to 3 weeks after the onset of primary infection and may suggest active or recent infection. IgM antibody is rarely detected 6 months after infection but may reappear with relapse and may persist in disseminated cases.

IgG antibody may also be demonstrated in response to the Immunodiffusion Complement Fixation (IDCF) antigen and may represent active or past infection. Negative fungal serology does not rule out current infection.

Coccidioides Antibody by CF	**1:16**	**H**	<1:2		ARRL

INTERPRETIVE INFORMATION: Coccidioides Ab by Complement Fixation (CF)

Any titer suggests past or current infection. However, greater than 30 percent of cases with chronic residual pulmonary disease have negative Complement Fixation (CF) tests. Titers of less than 1:32 (even as low as 1:2) may indicate past infection or self-limited disease; anticoccidiodal CF antibody titers in excess of 1:16 may indicate disseminated infection. CF serology may be used to follow therapy. Antibody in CSF is considered diagnostic for coccidioidal meningitis, although 10 percent of patients with coccidioidal meningitis will not have antibody in CSF.

Performing Site:
ARRL: ARUP REFERENCE LAB 500 Chipeta Way Salt Lake City UT 841081221

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

B813000006
WX0000003039
Printed D&T: 10/13/20 17:23

Ordered By: CLIENT CLIENT
WX00000000001595

William G. Finn, M.D. - Medical Director
Form: MM RL1

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

Inactivate Test With Replacement			
Effective Date	10/8/2020		
Inactivated Test			
Name	Microsatellite Instability (MSI), Tissue		
Code	MSI		
Legacy Code[1]	MSI		
Interface Order Code	3807100		
Notes			
Replacement Test			
Name	Microsatellite Instability, Tumor		
Code	TMSI		
CPT Code(s)	81301, 88381 ZB1VG		
Notes	Pathology report must accompany specimen in order for testing to be performed.		
Specimen Requirements			
Specimen Required	Send tumor tissue block. Approximately 0.6 x 0.6 cm area of tumor is required. Submit FFPE tissue block with corresponding hematoxylin and reosin (H and E) slides (preferred) or 1 slide stained with H and E and 5 unstained, nonbaked slides (5-micrometer thick sections) of the tumor tissue.		
Alternate Specimen	Formalin-fixed, paraffin-embedded (FFPE) prepared cell block or unstained slides.		
Rejection Criteria	Decalcified specimens, Low tumor percentage, insufficient amount of tumor nonformalin fixed, fresh tissue Cytology smears		
Stability	Room temperature: preferred; Refrigerated: Unacceptable; Frozen: Unacceptable		
Performing Information			
Methodology	Polymerase Chain Reaction (PCR)		
Reference Range	See report.		
Performed Days	Sunday - Saturday		
Turnaround Time	3 - 4 days		
Performing Laboratory	Mayo Clinic Laboratories		
Interface Information			
Legacy Code[1]	TMSI		
Interface Order Code	3800241		
Result Code	**Name**	**LOINC Code**	**AOE/Prompt[2]**
3800242	Result Summary	50397-9	No
3800243	Result	43368-0	No
3800244	Interpretation	69047-9	No
3800245	Specimen	31208-2	No
3800246	Source	31208-2	No
3800247	Tissue ID	80398-1	No

3800248	Release By	18771-6	No

Warde Medical Laboratory

LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
ANN ARBOR MI 48108

EXAMPLE, REPORT
WX0000002904 F 03/11/1991 29 Y

Referral Testing

Collected: 09/15/2020 10:30 Received: 09/15/2020 10:30

Test Name	Result	Flag	Ref-Ranges	Units	Site

Microsatellite Instability, Tumor

Result Summary	MSI-H				MAYO
Result	SEE BELOW				MAYO

Provided diagnosis:

MSI: MSI-H (instability observed in 7 of 7 informative markers)

Interpretation	SEE BELOW				MAYO

High levels of microsatellite instability (MSI-H) are indicative of defective DNA mismatch repair function within the tumor. The molecular etiology of tumors demonstrating defective DNA mismatch repair is very heterogeneous and can be associated with several different genes (MLH1, MSH2, MSH6, PMS2) and different mechanisms of gene inactivation (epigenetic, somatic, and germline alteration). The majority of sporadic colon cancers with defective DNA mismatch repair (approximately 90%) are caused by somatic epigenetic alterations, specifically hypermethylation of the MLH1 promoter.

PROGNOSTIC IMPLICATIONS
Colon cancers with defective DNA mismatch repair (MSI-H) have a significantly better prognosis compared to those with intact mismatch repair (MSS) (J Clin Oncol. 2005 Jan 20;23(3):609-18 (PMID 15659508)).

THERAPEUTIC IMPLICATIONS
Current data suggest that advanced stage solid tumors with defective DNA mismatch repair (MSI-H) are more likely to respond to treatment with immunotherapies such as anti-PD-1 therapies (Science. 2017 Jul 28;357(6349):409-413(PMID 28596308); J Clin Oncol. 2018 Jan 20:JCO2017769901 (PMID 29355075)). Stage II patients with colon cancers characterized by the presence of defective DNA mismatch repair (MSI-H) are unlikely to derive benefit from treatment with 5-FU based therapy (J Clin Oncol. 2010 Jul 10;28(20):3219-26 (PMID 20498393)).

HEREDITARY IMPLICATIONS
These results increase the risk that this individual has HNPCC/Lynch syndrome because tumors exhibiting an MSI-H

Example Client, XYZ123
1234 Warde Road
ANN ARBOR MI 48108

EXAMPLE, REPORT
WX0000002904 F 03/11/1991 29 Y

Referral Testing

Collected: 09/15/2020 10:30 Received: 09/15/2020 10:30

Test Name	Result	Flag	Ref-Ranges	Units	Site

phenotype can be associated with a germline mutation in one of the DNA mismatch repair genes. The use of immunohistochemistry (IHC / MMR Protein, IHC Only, tumor), followed by germline mutational analysis, can further evaluate the possibility of HNPCC/Lynch syndrome in this individual. A genetic consult may be of benefit.

ADDITIONAL INFORMATION
Consideration of these results, in light of other clinical information, may aid in clinical management decisions for this patient.

Of note, the literature suggests that MSI analysis on neoadjuvant chemoradiated tumor specimens may influence MSI status and lead to an erroneous interpretation of results (Int J Radiat Oncol Biol Phys. 2007 68(5):1584).

These data should be interpreted in the context of the histopathologic findings. A surgical pathology consult may be ordered separately. If immunohistochemistry (IHC) for the mismatch repair proteins was also ordered on this specimen, the results will be reported separately under test code IHC (IHC / MMR Protein, IHC Only, Tumor). For questions regarding the interpretation of IHC and MSI results, please contact the Genomics Laboratory at 1-800-533-1710.

----------ADDITIONAL INFORMATION----------
Microscopic examination was performed by a pathologist to identify areas of normal and tumor for enrichment by macrodissection. A PCR-based assay is used to test for tumor microsatellite instability (TMSI) with the use of 5 mononucleotide repeat markers (BAT25, BAT26, Mono27, NR24, and NR21). The tumor tissue is classified as MSS (instability detected in 0 or 1 out of 5 markers), or MSI-H (instability in 2 or more of 5 markers tested). Due to the sensitivity of the method being used, microsatellite instability cannot be reliably detected in samples containing less than 30% tumor DNA. Samples are routinely macrodissected to enrich for tumor cells, with those less than 30% rejected from further testing.
Test results should be interpreted in the context of clinical findings, family history, and other laboratory data. If results obtained do not match other clinical or laboratory findings, please contact the laboratory for

Example Client, XYZ123
1234 Warde Road
ANN ARBOR MI 48108

EXAMPLE, REPORT
WX0000002904 F 03/11/1991 29 Y

Referral Testing

Collected: 09/15/2020 10:30 Received: 09/15/2020 10:30

Test Name	Result	Flag	Ref-Ranges	Units	Site
	possible interpretation. Misinterpretation of results may occur if the information provided is inaccurate or incomplete. This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.				
Specimen	Tissue, Tumor				MAYO
Source	.				MAYO
Tissue ID	1234				MAYO
Release By	SEE BELOW				MAYO

RESULT: Irene Vehrenkamp

Test Performed by:
Mayo Clinic Laboratories - Rochester Main Campus
200 First Street SW, Rochester, MN 55905
Lab Director: William G. Morice M.D. Ph.D.; CLIA# 24D0404292

Warde Medical Laboratory

TEST DIRECTORY UPDATE

NOVEMBER 2020

Inactivate Test With Replacement			
Effective Date	10/27/2020		
Inactivated Test			
Name	N-methyl-D-Aspartate Receptor Ab IgG Serum w Reflex toTiter		
Code	NMDGR		
Legacy Code[1]	NMDGR		
Interface Order Code	3516150		
Notes			
Replacement Test			
Name	N-methyl-D-Aspartate Rcptr Ab, IgG, Ser		
Code	NMETD		
CPT Code(s)	86255, plus 86256 if reflexed to titer, at an additional fee		
Notes			
Specimen Requirements			
Specimen Required	Draw blood in a SST. Centrifuge, remove serum from cells within 2 hours of collection, send 1.0 mL serum (0.2 mL minimum) refrigerated in a screw-capped plastic vial.		
Rejection Criteria	CSF or plasma Contaminated, hemolyzed, or severely lipemic specimens.		
Stability	Room temperature: 48 hours; Refrigerated: 14 days; Frozen: 1 year		
Performing Information			
Methodology	Semi-quantitative Indirect Fluorescent Antibody		
Reference Range	< 1:10		
Performed Days	Sunday - Saturday		
Turnaround Time	2 - 4 days		
Performing Laboratory	ARUP Reference Laboratory		
Interface Information			
Legacy Code[1]	NMETD		
Interface Order Code	3600159		
Result Code	**Name**	**LOINC Code**	**AOE/Prompt[2]**
3600159	N-methyl-D-Aspartate Receptor Ab, Serum	80221-5	No
3600168	Bill_NMDA Titer	Not available	No

Warde Medical Laboratory

LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
ANN ARBOR MI 48108

EXAMPLE, REPORT
WX0000003096 M 07/18/2014 6 Y

Referral Testing

Collected: 09/21/2020 10:15 Received: 09/21/2020 10:15

Test Name	Result	Flag	Ref-Ranges	Units	Site
N-methyl-D-Aspartate Rcptr Ab, IgG, Ser					
N-methyl-D-Aspartate Receptor Ab, Serum	<1:10		<1:10		ARUP

INTERPRETIVE INFORMATION: N-methyl-D-Aspartate Receptor Ab, Serum
Anti-NMDA receptor IgG antibody is found in a subset of patients with autoimmune limbic encephalitis and may occur with or without associated tumor. Decreasing antibody levels may be associated with therapeutic response; therefore, clinical correlation must be strongly considered. A negative test result does not rule out a diagnosis of autoimmune limbic encephalitis.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement B: aruplab.com/CS
Performed By: ARUP Laboratories
500 Chipeta Way
Salt Lake City, UT 84108
Laboratory Director: Tracy I. George, MD

Bill_NMDA Titer	.TNP				ARRL

Performing Site:
ARRL: ARUP REFERENCE LAB 500 Chipeta Way Salt Lake City UT 841081221

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

B721000001
WX0000003096
Printed D&T: 10/13/20 17:27

Ordered By: CLIENT CLIENT
WX00000000001655

William G. Finn, M.D. - Medical Director
Form: MM RL1

Warde Medical Laboratory

LABORATORY REPORT

Example Client, XYZ123
1234 Warde Road
ANN ARBOR MI 48108

EXAMPLE, REPORT
WX0000003159 F 08/09/2006 14 Y

Referral Testing

Collected: 09/21/2020 10:16 Received: 09/21/2020 10:16

Test Name	Result	Flag	Ref-Ranges	Units	Site
N-methyl-D-Aspartate Rcptr Ab, IgG, Ser					
N-methyl-D-Aspartate Receptor Ab, Serum	**1:40**	**H**	<1:10		ARUP

INTERPRETIVE INFORMATION: N-methyl-D-Aspartate Receptor Ab, Serum
Anti-NMDA receptor IgG antibody is found in a subset of patients with autoimmune limbic encephalitis and may occur with or without associated tumor. Decreasing antibody levels may be associated with therapeutic response; therefore, clinical correlation must be strongly considered. A negative test result does not rule out a diagnosis of autoimmune limbic encephalitis.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement B: aruplab.com/CS
Performed By: ARUP Laboratories
500 Chipeta Way
Salt Lake City, UT 84108
Laboratory Director: Tracy I. George, MD

Bill_NMDA Titer	Billed				ARUP

Performed By: ARUP Laboratories
500 Chipeta Way
Salt Lake City, UT 84108
Laboratory Director: Tracy I. George, MD

LAB: L - LOW, H - HIGH, AB - ABNORMAL, C - CRITICAL, . - NOT TESTED

B721000002
WX0000003159
Printed D&T: 10/13/20 17:28

Ordered By: CLIENT CLIENT
WX00000000001718

William G. Finn, M.D. - Medical Director
Form: MM RL1