

Blue Cross Blue Shield of Massachusetts is an Independent Licensee of the Blue Cross and Blue Shield Association

Medical Policy

Laboratory Testing Investigational Services

Table of Contents

• Policy: Commercial

Coding Information

Information Pertaining to All Policies

Policy: Medicare

Description

References

Authorization Information

Policy History

Policy Number: 165

BCBSA Reference Number: 2.04.159 (For Plan internal use only)

NCD/LCD: N/A

Related Policies

- 029 Molecular Testing in the Management of Pulmonary Nodules prn.pdf
- 163 Maternal Serum Biomarkers for Prediction of Adverse Obstetric Outcomes.pdf
- 283 Novel Biomarkers in Risk Assessment and Management of Cardiovascular Disease prn.pdf
- 530 ST2 Assay for Chronic Heart Failure.pdf
- 555 Identification of Microorganisms Using Nucleic Acid Probe prn.pdf
- 581 Evaluation of Biomarkers for Alzheimer Disease.pdf
- 664 Cardiovascular Risk Panels prn.pdf
- 677 Multibiomarker Disease Activity Blood Test for Rheumatoid Arthritis prn.pdf
- 702 Serum Biomarker Panel Testing for Systemic Lupus Erythematosus and Other Connective Tissue Diseases prn.pdf
- 921 Noninvasive Techniques for the Evaluation and Monitoring of Patients With Chronic Liver Disease prn.pdf
- 045 Pathogen Panel Testing.pdf

Policy

Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO BlueSM and Medicare PPO BlueSM Members

All tests listed in this policy are considered **INVESTIGATIONAL** as there is insufficient evidence to determine that the technology results in an improvement in the net health outcome.

Test Name	Laboratory	PLA code
MicroGenDx	MicroGen Diagnostics	O112U See LCD for Medicare Advantage Biomarkers Overview (L35062)
Oncuria® Detect	DiaCarta Clinical Lab	0365U

Oncuria® Monitor	DiaCarta Clinical Lab	0366U	
Oncuria® Predict	DiaCarta Clinical Lab	0367U	
Qlear UTI	LifeScan Labs of Illinois, Thermo Fisher Scientific	0371U MP 045 Pathogen Panel Testing See LCD for Medicare Advantage MolDX: Molecular Diagnostic Tests (L35025)	
Qlear UTI - Reflex ABR	LifeScan Labs of Illinois, Thermo Fisher Scientific	0372U MP 045 Pathogen Panel Testing See LCD for Medicare Advantage MolDX: Molecular Diagnostic Tests (L35025)	
Respiratory Pathogen with ABR (RPX)	Lab Genomics LLC, Thermo Fisher Scientific	0373U MP 555 Identification of Microorganisms Using Nucleic Acid Probe See LCD for Medicare Advantage MoIDX: Molecular Diagnostic Tests (L35025)	
Urogenital Pathogen with Rx Panel (UPX)	Lab Genomics LLC, Thermo Fisher Scientific	0374U MP 045 Pathogen Panel Testing See LCD for Medicare Advantage MolDX: Molecular Diagnostic Tests (L35025)	
ArteraAl Prostate Test	Artera Inc.	0376U	
RFC1 Repeat Expansion Test	University of Chicago Genetic Services Laboratories	0377U MP 283 Novel Biomarkers in Risk Assessment and Management of Cardiovascular Disease	
NaviDKD® Predictive Diagnostic Screening for Kidney Health	Journey Biosciences, Inc	0384U	
PromarkerD Diabetic Kidney Disease Risk Assessment	Sonic Reference Laboratory, Proteomics International	0385U	
KawasakiDx™ (formerly PEPredictDx)	mProbe, Inc. (formerly OncoOmicsDx Laboratory)	0390U MP 163 Maternal Serum Biomarkers for Prediction of Adverse Obstetric Outcomes	

CyPath® Lung	Precision Pathology Services	0406U
SmartVascular Dx	SmartHealth DX	0415U
Prometheus® Crohn's Prognostic	Prometheus Laboratories	No specific code
Prometheus® IBD sgi Diagnostic®	Prometheus Laboratories	No specific code

Please refer to list of related evidence reviews for an assessment of other tests not listed in this policy.

Prior Authorization Information

Inpatient

 For services described in this policy, precertification/preauthorization <u>IS REQUIRED</u> for all products if the procedure is performed **inpatient**.

Outpatient

For services described in this policy, see below for products where prior authorization <u>might be</u> <u>required</u> if the procedure is performed <u>outpatient</u>.

	Outpatient
Commercial Managed Care (HMO and POS)	This is not a covered service.
Commercial PPO and Indemnity	This is not a covered service.
Medicare HMO Blue SM	This is not a covered service.
Medicare PPO Blue SM	This is not a covered service.

CPT Codes / HCPCS Codes / ICD Codes

Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

The following CPT codes are considered investigational for <u>Commercial Members: Managed Care</u> (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:

CPT Codes

CPT	
codes:	Code Description
0112U	Infectious agent detection and identification, targeted sequence analysis (16S and 18S rRNA genes) with drug-resistance gene
	Oncology (bladder), analysis of 10 protein biomarkers (A1AT, ANG, APOE, CA9, IL8, MMP9, MMP10, PAI1, SDC1 and VEGFA) by immunoassays, urine, algorithm reported
0365U	as a probability of bladder cancer
	Oncology (bladder), analysis of 10 protein biomarkers (A1AT, ANG, APOE, CA9, IL8, MMP9, MMP10, PAI1, SDC1 and VEGFA) by immunoassays, urine, algorithm reported
0366U	as a probability of recurrent bladder cancer
	Oncology (bladder), analysis of 10 protein biomarkers (A1AT, ANG, APOE, CA9, IL8,
0367U	MMP9, MMP10, PAI1, SDC1 and VEGFA) by immunoassays, urine, diagnostic algorithm

	reported as a risk score for probability of rapid recurrence of recurrent or persistent
	cancer following transurethral resection
	Oncology (prostate cancer), image analysis of at least 128 histologic features and clinical factors, prognostic algorithm determining the risk of distant metastases, and
0376U	prostate cancer-specific mortality, includes predictive algorithm to androgen deprivation- therapy response, if appropriate
	Nephrology (chronic kidney disease), carboxymethyllysine, methylglyoxal
	hydroimidazolone, and carboxyethyl lysine by liquid chromatography with tandem mass
	spectrometry (LC-MS/MS) and HbA1c and estimated glomerular filtration rate (GFR),
0384U	with risk score reported for predictive progression to high-stage kidney disease
0385U	Nephrology (chronic kidney disease), apolipoprotein A4 (ApoA4), CD5 antigen-like (CD5L), and insulin-like growth factor binding protein 3 (IGFBP3) by enzyme-linked immunoassay (ELISA), plasma, algorithm combining results with HDL, estimated glomerular filtration rate (GFR) and clinical data reported as a risk score for developing diabetic kidney disease.
03030	Gastroenterology (Barrett's esophagus), P16, RUNX3, HPP1, and FBN1 methylation
0386U	analysis, prognostic and predictive algorithm reported as a risk score for progression to high-grade dysplasia or esophageal cancer
040611	Oncology (lung), flow cytometry, sputum, 5 markers (meso-tetra [4-carboxyphenyl] porphyrin [TCPP], CD206, CD66b, CD3, CD19), algorithm reported as likelihood of lung
0406U	cancer
	Cardiovascular disease (acute coronary syndrome [ACS]), IL-16, FAS, FASLigand, HGF, CTACK, EOTAXIN, and MCP-3 by immunoassay combined with age, sex, family history, and personal history of diabetes, blood, algorithm reported as a 5-year (deleted risk)
0415U	score for ACS

Description

This policy applies if there is not a separate evidence review that outlines specific criteria for testing. If a separate evidence review does exist, then the criteria for medical necessity therein supersede the guidelines herein.

This policy addresses laboratory services considered to be investigational. These tests are often available on a clinical basis before the required and necessary evidence base to support clinical validity and utility is established. Because these tests are often proprietary, there may be no independent test evaluation data available in the early stages to support the laboratory's claims regarding test performance and utility. While studies using these tests may generate information that may help elucidate the biologic mechanisms of disease and eventually help design treatments, the tests listed in this policy are currently in a developmental phase, with limited evidence of clinical utility for diagnosis, prognosis, or risk assessment.

Summary

Description

There are numerous commercially available genetic and molecular diagnostic, prognostic, and therapeutic tests for individuals with certain diseases or asymptomatic individuals with future risk. This review relates to genetic and molecular diagnostic tests not addressed in a separate review. If a separate evidence review exists, then conclusions reached there supersede conclusions here. The main criterion for inclusion in this review is the limited evidence on the clinical utility for the test. As these tests do not have clinical utility, the evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Summary of Evidence

For individuals with various indications for diagnostic, prognostic, therapeutic, or future risk assessment testing who receive the genetic and molecular tests addressed in this review, the evidence on clinical utility is insufficient or non-evaluable. For each test addressed, a brief description is provided for

informational purposes. No formal evidence review was conducted. To sufficiently evaluate clinical utility, features of well-defined test, intended use, and clinical management pathway characteristics are summarized. If it is determined that enough evidence has accumulated to reevaluate its potential clinical utility, the test will be removed from this review and addressed separately. The lack of demonstrated clinical utility of these tests is based on the following factors: (1) there is no or extremely limited published data addressing the test; and/or (2) it is unclear where in the clinical pathway the test fits (replacement, triage, add-on); and/or (3) it is unclear how the test leads to changes in management that would improve health outcomes and/or avoiding existing burdensome and invasive testing; and/or (4) thresholds for decision making have not been established; (5) and/or the outcome from the test result does not result in a clinically meaningful improvement relative to the outcomes(s) obtained without the test.

Policy History

i oney mistory	
Date	Action
12/2023	Annual policy review. Policy updated with literature review through September 25, 2023. Policy statement unchanged.
	 Codes 0376U, 0384U, 0385U, ongoing investigational were transferred from MP #400 Non-covered services list to MP #165.
	 Codes 0368U, 0380U, 0405U, 0410U are managed by Carelon Genetic Testing program. Prior authorization is required through Carelon.
	These tests are managed by Carelon Genetic Testing program. Prior authorization is required through Carelon.
	 Prometheus® Celiac PLUS
	 DNA Methylation Pathway Profile
	■ know error®
10/2023	Coding information clarified.
8/2023	New medical policy describing ongoing investigational indications. Effective 8/2023.
	 These investigational codes: 0112U; 0365U, 0366U, 0367U were transferred from MP #400 Non-covered services list to MP #165.
	 Codes 0355U; 0362U are managed by Carelon Genetic Testing program. Prior authorization is required through Carelon.

Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

Medical Policy Terms of Usereview.

Managed Care Guidelines

Indemnity/PPO Guidelines

Clinical Exception Process

Medical Technology Assessment Guidelines

References

- 1. MicroGen Diagnostics. MicroGenDx: Information for Healthcare Professionals. 2023; https://microgendx.com/microgen-diagnostics-specialties/. Accessed September 25, 2023.
- Quest Diagnostics. Apolipoprotein L1 (APOL1) Renal Risk Variant Genotyping. December 16, 2022; https://www.questdiagnostics.com/healthcare-professionals/clinical-education-center/fag/fag287#accordion-48070ca605-item-e92bca3e39. Accessed May 12, 2023.
- 3. Protean Biodiagnostics. Thyroid GuidePx. n.d.; https://www.proteanbiodx.com/thyroidguidepx. Accessed September 25. 2023.
- 4. Nonagen Bioscience. Introducing Oncuria: A Next-Generation Oncology Diagnostic. 2022; https://www.nonagen.com/products. Accessed September 25, 2023.
- 5. Murakami K, Kamat AM, Dai Y, et al. Application of a multiplex urinalysis test for the prediction of intravesical BCG treatment response: A pilot study. Cancer Biomark. 2022; 33(1): 151-157. PMID 34511488
- DiaCarta. ColoScape Colorectal Cancer Detection Test. 2018; https://www.diacarta.com/services/coloscape. Accessed September 25, 2023.

- 7. ThermoFisher Scientific. Urinary Tract Infection (UTI) Testing Research Solutions. 2022; https://www.thermofisher.com/us/en/home/clinical/clinical-genomics/pathogen-detection-solutions/realtime-pcr-solution-urinary-tract-microbiota-detection.html. Accessed September 25, 2023.
- Lab Genomics. Respiratory Panel (RP) Rapid Molecular Diagnostic Test. 2018; https://labgenomic.com/wp-content/uploads/2018/11/RPPanelPamphlet1.pdf. Accessed September 25, 2023.
- Lab Genomics. Urinary Pathogen Test (UPX) Rapid Molecular Diagnostic Test. 2018; https://labgenomic.com/wp-content/uploads/2018/12/UTI-Brochure-FINAL.pdf. Accessed September 25. 2023.
- 10. ArteraAl. ArteraAl Prostate Test. n.d.; https://artera.ai/arteraai-prostate-cancer-test. Accessed September 25, 2023.
- 11. The University of Chicago Genetic Services Laboratories. Single Gene Repeat Expansion Analysis. 2023; https://dnatesting.uchicago.edu/tests/single-gene-repeat-expansion-analysis. Accessed September 25, 2023.
- 12. Lab Genomics. Drug Metabolism. n.d.; https://labgenomic.com/drug-metabolism/. Accessed September 25, 2023.
- 13. Journey Biosciences. NaviDKD: A Powerful Predictive Screening. 2023; https://www.journeybio.life/solution#start-your-journey. Accessed September 25, 2023.
- 14. Sonic Reference Laboratory. PromarkerD Diabetic Kidney Disease Risk Assessment. 2023; https://www.sonicreferencelab.com/featured-testing/diabetic-kidney-disease-risk-assessment/. Accessed September 25, 2023.
- 15. Previse. Esopredict: Information for Healthcare Providers. 2023; https://previsedx.com/ourtest/esopredict-for-providers/. Accessed September 25, 2023.
- 16. mProbe, Inc. Kawasaki Disease. 2023; https://www.mprobe.com/kawasakidx. Accessed September 25, 2023.
- 17. Breakthrough Genomics. Welcome to Breakthrough Genomics. 2023; https://btgenomics.com/. Accessed September 25, 2023.
- 18. Precision Pathology Services. Why Use CyPath Lung. 2022; https://cypath.precisionpath.us/cypath-physician/. Accessed September 25, 2023.
- 19. ClearNote Health. Avantect Pancreatic Cancer Test. 2023; https://www.avantect.com/avantect-test/. Accessed September 25, 2023.
- 20. SmartHealth Dx. SmartVascular Dx. 2023; https://www.smarthealthdx.com/smartvascular-dx/. Accessed September 25, 2023.
- 21. Prometheus Laboratories. Prometheus Celiac Plus. 2023; https://prometheuslabs.com/disease-tests/celiac-plus/. Accessed September 23, 2023.
- 22. Prometheus Laboratories. Prometheus Crohn's Prognostics. 2023; https://prometheuslabs.com/disease-tests/crohns-prognostic/. Accessed September 25, 2023.
- 23. Mosaic Diagnostics. DNA Methylation Pathway Profile. 2023; https://mosaicdx.com/test/dna-methylation-pathway-profile/. Accessed September 25, 2023.
- 24. Genova Diagnostics. GI effects. n.d.; https://www.gdx.net/products/gi-effects. Accessed September 25, 2023.
- 25. Prometheus Laboratories. Prometheus IBD sgi Diagnostic. 2023; https://prometheuslabs.com/disease-tests/ibd-sgi-diagnostic/. Accessed September 25, 2023.
- 26. Strand Diagnostics. Know Error: Be DNA Certain. 2020; https://knowerror.com/index.html. Accessed September 25, 2023.
- 27. Singh S, Ananthakrishnan AN, Nguyen NH, et al. AGA Clinical Practice Guideline on the Role of Biomarkers for the Management of Ulcerative Colitis. Gastroenterology. Mar 2023; 164(3): 344-372. PMID 36822736
- 28. Lichtenstein GR, Loftus EV, Isaacs KL, et al. ACG Clinical Guideline: Management of Crohn's Disease in Adults. Am J Gastroenterol. Apr 2018; 113(4): 481-517. PMID 29610508
- 29. Anger J, Lee U, Ackerman AL, et al. Recurrent Uncomplicated Urinary Tract Infections in Women: AUA/CUA/SUFU Guideline. J Urol. Aug 2019; 202(2): 282-289. PMID 31042112
- 30. Chang SS, Boorjian SA, Chou R, et al. Diagnosis and Treatment of Non-Muscle Invasive Bladder Cancer: AUA/SUO Guideline. J Urol. Oct 2016; 196(4): 1021-9. PMID 27317986

- 31. National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines): Bladder Cancer [Version 3.2023]. May 25, 2023; https://www.nccn.org/professionals/physician_gls/pdf/bladder.pdf. Accessed September 25, 2023.
- 32. National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology: Colon Cancer [Version 3.2023]. September 21, 2023; https://www.nccn.org/professionals/physician_gls/pdf/colon.pdf. Accessed September 24, 2023.
- 33. Wand H, Lambert SA, Tamburro C, et al. Improving reporting standards for polygenic scores in risk prediction studies. Nature. Mar 2021; 591(7849): 211-219. PMID 33692554