## Coverage Summary

### Laboratory Tests and Services

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<tr>
<td>Approved by: UnitedHealthcare Medicare Benefit Interpretation Committee</td>
<td>Last Review Date: 04/16/2019</td>
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### Related Medicare Advantage Policy Guidelines:

- Clinical Diagnostic Laboratory Services
- Corus® CAD (Coronary Artery Disease)
- Heartsbreath Test for Heart Transplant Rejection (NCD 260.10)
- Histocompatability Testing (NCD 190.1)
- Human Tumor Stem Cell Drug Sensitivity Assays (NCD 190.7)
- Laboratory Tests - CRD Patients (NCD 190.10)
- Lymphocyte Mitogen Response Assays (NCD 190.8)
- Obsolete or Unreliable Diagnostic Tests (NCD 300.1)
- Pharmacogenomic Testing for Warfarin Response (NCD 90.1)
- Qualitative Drug Testing for Indications Other Than Mental Health
- Serologic Testing for Acquired Immunodeficiency Syndrome (AIDS) (NCD 190.9)
- Vitamin D Testing

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      b. Blood Count
      c. Blood Glucose
      d. Human Chorionic Gonadotropin (hCG)
      e. HIV Testing (Diagnosis)
      f. HIV Testing (Prognosis and Monitoring)
      g. HIV Serologic Testing
      h. Pharmacogenomic Testing for Warfarin Response
      i. Prothrombin Test
      j. PTT (Partial Thromboplastin Time)
### I. COVERAGE

**Coverage Statement:** Laboratory tests and services are covered when Medicare coverage criteria are met.

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<td>Serum Iron studies</td>
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<td>m.</td>
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<td>Lymphocyte mitogen Response Assays</td>
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<td>y.</td>
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| g. | Serum Testing for Genetic Predisposition for Huntington’s Chorea |
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| i. | School Admissions and Athletic Requirement for Laboratory Testing |
| j. | Cytotoxic Food Tests |
| k. | Heartsbreath Test for Heart Transplant Rejection |
Guidelines/Notes:

1. Laboratory services (inpatient or outpatient) are covered in support of basic health care services to be used in the screening or detection of disease and determined to be reasonable and medically necessary.


2. The following clinical diagnostic laboratory tests and services are covered when Medicare criteria are met as outlined in the corresponding applicable NCDs:

   a. Urine Culture, Bacterial; see the NCD for Urine Culture, Bacterial (190.12). (Accessed April 2, 2019)

   b. Blood Count; see the NCD for Blood Counts (190.15). (Accessed April 2, 2019)


   d. Human Chorionic Gonadotropin (hCG); see the NCD for Human Chorionic Gonadotropin (hCG) (190.27). (Accessed April 2, 2019)

   e. HIV testing (Diagnosis); see the NCD for Human Immunodeficiency Virus (HIV) Testing (Diagnosis) (190.14). (Accessed April 2, 2019)

   f. HIV Testing (Prognosis and Monitoring); see the NCD for Human Immunodeficiency Virus (HIV) Testing (Prognosis Including Monitoring) (190.13). (Accessed April 2, 2019)

   g. HIV Serologic Testing; see the NCD for Serologic Testing for Acquired Immunodeficiency Syndrome (AIDS) (190.9). (Accessed April 2, 2019)

   h. Pharmacogenomic Testing for Warfarin Response

      Effective August 3, 2009, the Centers for Medicare & Medicaid Services (CMS) believes that the available evidence supports that coverage with evidence development (CED) under §1862(a)(1)(E) of the Social Security Act (the Act) is appropriate for pharmacogenomic testing of CYP2C9 or VKORC1 alleles to predict warfarin responsiveness by any method, and is therefore covered only when provided to Medicare beneficiaries who are candidates for anticoagulation therapy with warfarin who meet the criteria outlined in the NCD for Pharmacogenomic Testing for Warfarin (90.1). (Accessed April 2, 2019)


      For payment rules for NCDs requiring CED, see the Coverage Summary for Experimental Procedures and Items, Investigational Devices and Clinical Trials.

   i. Prothrombin Test; see the NCD for Prothrombin Time (PT) (190.17). (Accessed April 2, 2019)
j. PTT (Partial Thromboplastin Time); see the NCD for Partial Thromboplastin Time (PTT) (190.16). (Accessed April 2, 2019)
k. Serum Iron studies; see the NCD for Serum Iron Studies (190.18). (Accessed April 2, 2019)
l. Sweat Test for Diagnosis of Cystic Fibrosis; see the NCD for Sweat Test (190.5). (Accessed April 2, 2019)
m. Lipid Testing; see the NCD for Lipid Testing (190.23). (Accessed April 2, 2019)
n. Thyroid Testing; see the NCD for Thyroid Testing (190.22). (Accessed April 2, 2019)
o. Hepatitis Panel; see the NCD for Hepatitis Panel/Acute Hepatitis Panel (190.33). (Accessed April 2, 2019)
p. Breath Analysis test for lactose breath hydrogen to detect lactose malabsorption; see the NCD for Diagnostic Breath Analyses (100.5). (Accessed April 2, 2019)
q. Alpha-fetoprotein; see NCD for Alpha-fetoprotein (AFP) (190.25). (Accessed April 2, 2019)
r. Carcinoembryonic Antigen; see the NCD for Carcinoembryonic Antigen (CEA) (190.26). (Accessed April 2, 2019)
s. Collagen Cross Link; see the NCD for Collagen Crosslinks, any Method (190.19). (Accessed April 2, 2019)
t. Digoxin Therapeutic Drug Assay; see the NCD for Digoxin Therapeutic Drug Assay (190.24). (Accessed April 2, 2019)
u. Gamma Glutamyl Transferase; see the NCD for Gamma Glutamyl Transferase (GGT) (190.32). (Accessed April 2, 2019)
v. Glycated Hemoglobin/Glycated Protein; see the NCD for Glycated Hemoglobin/Glycated Protein (190.21). (Accessed April 2, 2019)
w. Laboratory Tests for CRD Patients; see the NCD for Laboratory Tests – CRD Patients (190.10). (Accessed April 2, 2019) 
Also see the Coverage Summary for Dialysis Services.
x. Lymphocyte Mitogen Response Assays; see the NCD for Lymphocyte Mitogen Response Assays (190.8). (Accessed April 2, 2019)
Also see the Coverage Summary for Transplants: Organ and Tissue Transplants.
y. Histocompatibility Testing; see the NCD for Histocompatibility Testing (190.1). (Accessed April 2, 2019)
Also see the Coverage Summary for Transplants: Organ and Tissue Transplants
For specific criteria and codes, see the Medicare NCD Coding Policy Manual and Change Report for Clinical Laboratory Diagnostic. (Accessed April 2, 2019)

3. Other Laboratory Tests and Services
a. Home Blood Draws (Venipunctures)
   Medically necessary home blood draws (venipunctures) by an independent laboratory technician are covered in the following circumstances:
   • Patient is confined to home or other place of residence used as his or his home when
the specimen is a type which would require the skills of a laboratory technician (e.g., where a laboratory technician draws a blood specimen). For definition of homebound, see the Medicare Benefit Policy Manual, Chapter 7, §30.1.1 - Patient Confined to the Home. (Accessed April 2, 2019)

- Patient’s place of residence is an institution, only if:
  - The patient was confined to the facility; and
  - The facility did not have on duty personnel qualified to perform the service.

**Note:** Specimen which would require only the services of a messenger and would not require the skills of a laboratory technician (e.g., urine or sputum), a specimen pickup service would not be considered medically necessary.

See the Medicare Benefit Policy Manual, Chapter 15, §80.1.3 - Independent Laboratory Service to a Patient in the Patient’s Home or an Institution. (Accessed April 2, 2019)

b. **Molecular Diagnostic Tests** (MDT); see the Coverage Summary for Genetic Testing.

c. **Vitamin D Assays** (CPT code 82306)

- Medicare does not have a National Coverage Determination (NCD) for Vitamin D Assays.
- Local Coverage Determinations (LCDs)/Local Coverage Article (LCAs) exist for all 50 states and compliance with these policies is required where applicable. For state-specific LCDs/LCAs, refer to the LCD Availability Grid (Attachment A).
- **Committee approval date:** April 16, 2019
- **Accessed October 1, 2019**

d. **B-type Natriuretic Peptide** (BNP) Measurements (CPT code 83880)

- Medicare does not have a National Coverage Determination (NCD) for B-type Natriuretic Peptide (BNP) measurements.
- Local Coverage Determinations (LCDs)/Local Coverage Article (LCAs) exist and compliance with these policies is required where applicable. For state-specific LCDs/LCAs, refer to the Availability Grid (Attachment B).
- **For states with no LCDs/LCAs,** see the Noridian LCD for B-type Natriuretic Peptide (BNP) Testing (L34038) for coverage guideline. (IMPORTANT NOTE: After checking the LCD Availability Grid and searching the Medicare Coverage Database, if no state LCD/LCA is found, then use the above referenced policy.)
- **Committee approval date:** April 16, 2019
- **Accessed October 1, 2019**

e. **Chemosensitivity and Chemoresistance Assays** (CSRAs)

1) **Human Tumor Stem Cell Drug Sensitivity Assay**

The NCD for Human Tumor Stem Cell Drug Sensitivity Assay (190.7) addresses 2 distinct types of assays:

- Human Tumor stem cell drug sensitivity assays, and
- Fluorescent Cytoprint Assays.

Human tumor drug sensitivity assays are considered experimental, and therefore, not covered under Medicare at this time. The clinical application of the assay, based on testing in tumor microorgans rather than in clones derived from single cells, is considered experimental, and therefore, not covered under Medicare at this time.

See the NCD for Human Tumor Stem Cell Drug Sensitivity Assay (190.7). (Accessed April 2, 2019)
2) Other Chemosensitivity and Chemoresistance Assays (CSRAs)
Examples include but are not limited to Oncotech Extreme Drug Resistance (EDR) assay, DiSC (Differential staining cytotoxicity) assay, ATP (Adenosine Triphosphate) assay, MTT (Methyl Thiazolyl Tetrazolium) assay, HYDRA® (AntiCancer inc) assay, EVA-PCD (Rational Therapeutics) assay, and ChemoFx® assay.

- Medicare does not have a National Coverage Determination (NCD) for CSRAs.
- Local Coverage Determinations (LCDs)/Local Coverage Article (LCAs) exist and compliance with these policies is required where applicable. For state-specific LCD/LCAs, refer to the LCD Availability Grid (Attachment C).
- For states with no LCDs/LCAs, see the UnitedHealthcare Commercial Medical Policy for Chemosensitivity and Chemoresistance Assays in Cancer for coverage guideline. (IMPORTANT NOTE: After checking the LCD Availability Grid and searching the Medicare Coverage Database, if no state LCD/LCA is found, then use the above referenced policy.)
- Committee approval date: April 16, 2019
- Accessed October 1, 2019


4. Other laboratory tests and services that are not covered include, but are not limited to:

a. Obsolete and unreliable diagnostic tests; see the NCD for Obsolete or Unreliable Diagnostic Tests (300.1). (Accessed April 3, 2019)

b. Hair analysis; see the NCD for Hair Analysis (190.6). (Accessed April 10, 2018)

c. Breath tests for the following:
   - Lactulose breath hydrogen for diagnosing small bowel bacterial overgrowth and measuring small bowel transit time.
   - CO2 for diagnosing bile acid malabsorption.
   - CO2 for diagnosing fat malabsorption.
   See the NCD for Diagnostic Breath Analyses (100.5). (Accessed April 3, 2019)


e. Employer or legally required drug or alcohol testing; see the Medicare Benefit Policy Manual, Chapter 16, §20 – Services Not Reasonable and Necessary. (Accessed April 3, 2019)

f. Genetic testing to determine predisposition to an inherited disease (carrier status) or when the test will not be used to determine the care of member; see the Medicare Benefit Policy Manual, Chapter 16, §20 – Services Not Reasonable and Necessary. (Accessed April 3, 2019)

Also see the Coverage Summary for Genetic Testing

g. Serum testing for genetic predisposition for Huntington’s Chorea; see the Medicare Benefit Policy Manual, Chapter 16, §20 – Services Not Reasonable and Necessary. (Accessed April 3, 2019)

Also see Coverage Summary for Genetic Testing

h. Pre-marital blood testing; see the Medicare Benefit Policy Manual, Chapter 16, §20 –
School admissions and athletic requirement for laboratory testing; see the Medicare Benefit Policy Manual, Chapter 16, §20 – Services Not Reasonable and Necessary. (Accessed April 3, 2019)

Cytotoxic food tests; see the NCD for Cytotoxic Food Tests (110.13). (April 3, 2019)

Also see the Coverage Summary for Allergy Testing and Allergy Immunotherapy

Heartsbreath test for heart transplant rejection; see the NCD for Heartsbreath Test for Heart Transplant Rejection (260.10). (Accessed April 3, 2019)

Also see the Coverage Summary for Preventive Health Services and Procedures and the Coverage Summary for Genetic Testing.

II. DEFINITIONS

**Laboratory:** Any facility which performs laboratory testing on specimens derived from humans for the purpose of providing information for the diagnosis, prevention, treatment of disease, or impairment of, or assessment of health. Medicare Benefit Policy Manual, Chapter 15, §80.1 - Clinical Laboratory Services. (Accessed April 3, 2019)

III. REFERENCES

See above

IV. REVISION HISTORY

04/16/2019 Annual review with the following update:
Guideline 2.g (HIV Serology Testing) – changed “Serogy” to “Serologic”; consistent with the reference NCD.

04/01/2019

• Updated policy introduction; added language to clarify:
  o There are instances where [the Coverage Summary] may direct readers to a UnitedHealthcare Commercial Medical Policy, Medical Benefit Drug Policy, and/or Coverage Determination Guideline (CDG)
  o In the absence of a Medicare National Coverage Determination (NCD), Local Coverage Determination (LCD), or other Medicare coverage guidance, CMS allows a Medicare Advantage Organization (MAO) to create its own coverage determinations, using objective evidence-based rationale relying on authoritative evidence (Medicare IOM Pub. No. 100-16, Ch. 4, §90.5)
  • Retitled reference link that directs users to UnitedHealthcare Commercial policy

09/18/2018 Updated Local Coverage Determination (LCD) Availability Grids; removed instruction to “use the applicable LCD based on member’s residence/place and type of service” (this note only applies when selecting the appropriate DME LCD Policy)

05/11/2018 Re-review with following update:
Guideline 3.b [Human Immunodeficiency Virus (HIV) Tropism Testing (CPT codes 87901, 87903, 87904, and 87906)] – Deleted from coverage summary (all CMS references have been retired).

04/17/2018 Annual review with the following update:
Guideline 3.g [Next Generation Sequencing (NGS)] – New to coverage summary; added cross reference link to the Coverage Summary for Genetic Testing.
01/16/2018 Re-review with the following updates:
Guideline 3.b [Human Immunodeficiency Virus (HIV) Tropism] - Updated the applicable LCDs to include the most recent website links and effective dates related to the Cahaba-Palmetto jurisdiction transition; no change in guideline.
Guideline 3.d (Vitamin D Assays) - Updated the applicable LCDs to include the most recent website links and effective dates related to the Cahaba-Palmetto jurisdiction transition; no change in guideline.
Guideline 3.e (B-type Natriuretic Peptide (BNP) Measurements) - Updated the applicable LCDs to include the most recent website links and effective dates related to the Cahaba-Palmetto jurisdiction transition; no change in guideline.
Guideline 3.f.2 (Other Chemosensitivity and Chemoresistance Assays (CSRAs) - Updated the applicable LCDs to include the most recent website links and effective dates related to the Cahaba-Palmetto jurisdiction transition; no change in guideline.

04/18/2017 Annual review with the following updates:
Guideline 2.w (Laboratory tests for CRD patients) – added referenced link to the Coverage Summary for Dialysis Services
Guideline 2.x (Lymphocyte Mitogen Response Assays) – added a reference link to the Coverage Summary for Transplants - Organ and Tissue Transplants.
Guideline 3.d (Vitamin D Assays) – updated guideline to state that all 50 states now have LCDs; deleted that statement to refer to the LCD for Vitamin D Assay Testing (L34658) for coverage guidelines.
Guideline 3.f.1 (Human Tumor Stem Cell Drug Sensitivity Assay) - language clean up

04/19/2016 Annual review with the following recommended updates:
Guideline 3. f – Created a new section title “Chemosensitivity and Chemoresistance Assays (CSRAs)” to include the following:
  • 3.f.1) (Human Tumor Stem Cell Drug Sensitivity Assay) with no change in guideline content and NCD reference
  • 3.f.2) Other Chemosensitivity and Chemoresistance Assays (CSRAs) with default to the UnitedHealthcare Medical Policy for UnitedHealthcare Medical Policy for Chemosensitivity and Chemoresistance Assays in Cancer for coverage guidelines since there are no applicable NCD and LCDs available at this time.
Updated all reference links of the applicable LCDs to reflect the condensed link.

11/17/2015 Guideline 3.c [Biomarkers for Oncology (e.g., OVA1™ Assay, VeriStrat® Assay)] – moved to Genetic Testing Coverage Summary under Guideline 4 (Other Genetic Tests)
Guideline 3.g (Loss-of-Heterozygosity Based Topographic Genotyping with PathfinderTG®) – moved to Genetic Testing Coverage Summary under Guideline 4 (Other Genetic Tests)
Guideline 3.h [PLAC® Test for Lipoprotein-associated phospholipase A2 (Lp-PLA2)] – moved to Genetic Testing Coverage Summary under Guideline 3 (Molecular Diagnostic Tests)

07/21/2015  Re-review with following update:
Guideline 3.b [Human Immunodeficiency Virus (HIV) Tropism Testing (CPT codes 87901, 87903, 87904, and 87906)] – Changed default for states without LCDs from UnitedHealthcare Medical Policy for Human Immunodeficiency Virus (HIV) Tropism Testing (retired) to the Palmetto LCD for Infectious Disease Molecular Diagnostic Testing (L31747).

04/21/2015  Annual review with the following updates:
Policy re-numbered.
Guideline 2.a (Urinalysis) - Removed; not listed under the Lab NCDs
Guideline 2.g (HIV serology testing) - Removed coverage language; already addressed in the referenced NCD
Guideline 2.h (Pharmacogenomic Testing for Warfarin Response)
- Added reference link to the list of Medicare approved clinical trials.
- Added reference link to the Coverage Summary for Experimental Procedures and Items, Investigational Devices and Clinical Trials for payment rules for NCDs requiring CED.
Guideline 2.m (Lipid testing)
- Removed the reference link to the LCDs for Lipid Profile/Cholesterol Testing; LCDs no longer available.
- Removed the claims information for VDL cholesterol (83719) and apolipoprotein (82172); reference LCD retired.
- Removed reference link to the NCD coding Manual and Change Report for Clinical Laboratory Diagnostic Test.
Guideline 2.z (Electron Microscope) - Removed guideline; reference NCD for Electron Microscope (190.4) retired.
Guideline 2 (Clinical Diagnostic Laboratory Services that are Covered) - Removed reference link to the Medicare Claims Processing Manual, Chapter 16 - Laboratory Tests.
Guideline 3.b (Human Immunodeficiency Virus (HIV) Tropism Testing)
- Added CPT codes 87901, 87903, 87904, and 87906
- Added language to state that LCDs exist.
Guideline 3.e (Vitamin D Assays)
- Added CPT code 82306
- Changed default guideline for states with no LCDs from National Government Services LCD for Vitamin D Assay Testing (L29510) to Wisconsin LCD for Vitamin D Assay Testing (L31076)
Guideline 3.f (B-type Natriuretic Peptide Measurements)
- Added CPT code 83880
- Changed default guideline for states with no LCDs from Cahaba LCD for
Pathology and Laboratory: B-type Natriuretic Peptide (BNP) Testing (L30046) to Noridian LCD for B-type Natriuretic Peptide (BNP) Testing (L31568).

Guideline 3.g (Loss-of-Heterozygosity Based Topographic Genotyping with PathfinderTG®) - Removed detailed guideline; already in addressed in the referenced default LCD, i.e., Novitas LCD for Loss-of-Heterozygosity Based Topographic Genotyping with PathfinderTG® (L31144)

Guideline 3.i (Human Tumor Stem Cell Drug Sensitivity Assay) - Added the following:

This NCD addresses 2 distinct types of assays:
- Human Tumor stem cell drug sensitivity assays, and
- Fluorescent Cytoprint Assays.

Human tumor drug sensitivity assays are considered experimental, and therefore, not covered under Medicare at this time. The clinical application of the assay, based on testing in tumor microorgans rather than in clones derived from single cells, is considered experimental, and therefore, not covered under Medicare at this time.

Guideline 3.j (ChemoFx® Assay)

Added the statement that there are no available LCDs.

Removed the reference to the UnitedHealthcare Medical Policy for Chemosensitivity and Chemoresistance Assay in Cancer for coverage guidelines for states with no LCDs; there is no need to have a default policy since Medicare pays for this test via Novitas.

Definitions - Removed the definition of homebound; reference link to the Medicare Benefit Policy Manual for the definition of homebound; added under Guideline 3.a (Home blood draws).

08/19/2014 Guideline 5 [Biomarkers for Oncology (e.g., OVA1™ Assay, VeriStrat® Assay)] - Added coverage guidelines (new to this policy); removed from the Coverage Summary the guidelines specific to OVA1™ Assay only.

04/15/2014 Annual review with the following updates:
- Guideline 5 (OVA1™ Assay) – updated to include the reference to the Novitas LCD L33138
- Guideline #6 (Molecular Diagnostic Tests) – updated to include the statement “Palmetto coordinates with Noridian Administrative Services to develop appropriate LCDs.” Also added the reference and link to the Palmetto MolDX Program Information Site

10/24/2013 Guideline 5 (OVA1™ Assay) - Changed default guidelines from Novitas LCD for Ova-1 Assay (L31161) (retired) to Novitas LCD for Biomarkers for Oncology (L33142)

Guideline 6 [Molecular Diagnostic Tests (MDT)] - Changed default guidelines from Palmetto LCD for Molecular Diagnostic Tests (L32288) (retired) to Noridian LCD for Molecular Diagnostic Tests (L33541)

Guidelines 10 [PLAC® Test for Lipoprotein-associated phospholipase A2 (Lp-PLA2) (CPT code 83698)] - Added applicable guidelines with default to the UnitedHealthcare Medical Policy for Cardiovascular Disease Risk Tests as default guidelines for states with no LCDs
Guidelines 6 (Molecular Diagnostic Tests) - updated to include the most current link to the Palmetto GBA LCD for Molecular Diagnostic Tests (MDT) (L32288) and related Articles

Annual review with the following updates:
- Guidelines 2.i (Pharmacogenomic Testing for Warfarin Response) - added applicable coverage guidelines (new to policy)
- Guidelines 2.n (Lipid Testing) - replaced link from National Government Services LCD for Lipid Profile/Cholesterol Testing (L27352) (retired) to Novitas LCD for Lipid Profile/Cholesterol Testing (L32559)

Guidelines 6 (Molecular Diagnostic Tests) updated; deleted related articles that are no longer available.

Guidelines 9 (Loss-of-Heterozygosity Based Topographic Genotyping with PathfinderTG®) added

Updated to include Guidelines #6 Molecular Diagnostic Tests (MDT); in addition, Guidelines for Allomap Molecular Expression Testing was moved as part of Guidelines 6 [Molecular Diagnostic Tests (MDT)]

Annual review with the following updates:
1) Guidelines 2.m (Lipid Testing) - updated with additional info on VDL cholesterol (83719) and apolipoprotein (82172)
2) Guidelines 6 (Allomap Molecular Expression Testing) – updated to include the new available Local Articles
3) Guidelines 7 (Vitamin D Assay) - added
4) Guidelines 8 (B-type Natriuretic Peptide Measurements) - added

Guidelines 7.a updated, i.e., deleted ChemoFx as one of the examples. Added Guidelines 2.b for ChemoFx

Updated to include Guidelines # 6 (Allomap Molecular Expression Testing)

Annual review; updated to include Guidelines #5 (Ova-1 Assay). Also updated Guidelines 7.a (Human tumor stem cell drug sensitivity assays) to include examples and LCD reference and links

V. ATTACHMENT(S)

### Attachment A - LCD Availability Grid

**Vitamin D Assay Test**
(CPT code 82306)

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<th>LCD Title</th>
<th>Contractor Type</th>
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<th>States</th>
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<td>L33418</td>
<td>Assays for Vitamins and Metabolic Function</td>
<td>A and B MAC</td>
<td>Palmetto GBA</td>
<td>SC, VA, WV, NC AL, GA, TN</td>
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<td>L37535</td>
<td>Vitamin D Assay Testing</td>
<td>MAC - Part A and B A and B MAC</td>
<td>National Government Services, Inc.</td>
<td>CT, IL, MN, NY, ME, MA, NH RI, WI, VT</td>
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<td>L34914</td>
<td>Assays for Vitamins and Metabolic Function</td>
<td>A and B MAC</td>
<td>Novitas Solutions, Inc.</td>
<td>CO, NM, OK, TX AR, LA, MS</td>
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<td>L33771</td>
<td>Vitamin D; 25 hydroxy, includes fraction(s), if performed</td>
<td>A and B MAC</td>
<td>First Coast Service Options, Inc.</td>
<td>FL, PR, VI</td>
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CMS website accessed October 1, 2019
# Attachment A - LCD Availability Grid

### Vitamin D Assay Test

(CPT code 82306)

CMS website accessed October 1, 2019

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<th>Contractor Type</th>
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<td>L34658</td>
<td>Vitamin D Assay Testing</td>
<td>MAC – Part A and B</td>
<td>Wisconsin Physicians Service Insurance Corporation</td>
<td>IA, IN, KS, MI, MO, NE</td>
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<tr>
<td>L34658</td>
<td>Vitamin D Assay Testing</td>
<td>MAC - Part A and B</td>
<td>Wisconsin Physicians Service Insurance Corporation</td>
<td>AK, AL, AR, AZ, CA, CO, CT, DE, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MA, MD, ME, MI, MO, MS, MT, NC, ND, NE, NH, NJ, NM, NV, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VA, VT, WA, WI, WV, WY</td>
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<td>L34051</td>
<td>Vitamin D Assay Testing</td>
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<td>L33996</td>
<td>Vitamin D Assay Testing</td>
<td>MAC - Part A and B</td>
<td>CGS Administrators, LLC</td>
<td>KY, OH</td>
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</tbody>
</table>

End of Attachment A

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# Attachment B - LCD Availability Grid

### B-type Natriuretic Peptide (BNP) Measurements

(CPT code 83880)

CMS website accessed October 1, 2019

<table>
<thead>
<tr>
<th>LCD ID</th>
<th>LCD Title</th>
<th>Contractor Type</th>
<th>Contractor</th>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>L34410</td>
<td>B-type Natriuretic Peptide (BNP)</td>
<td>A and B MAC</td>
<td>Palmetto GBA</td>
<td>AL, GA, NC, SC, TN, VA, WV</td>
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<tr>
<td>L34410</td>
<td>Testing</td>
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<tr>
<td>L33422</td>
<td>Brain Natriuretic Peptide (BNP)</td>
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<td>Palmetto GBA</td>
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<td>L33422</td>
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<td>L33573</td>
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<td>MAC - Part A and B</td>
<td>National Government Services, Inc.</td>
<td>IL, MN, WI, CT, NY, ME, MA, NH, RI, VT</td>
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<td>L33573</td>
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<td>L33267</td>
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<td>FL, PR, VI</td>
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<td>L34038</td>
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<td>AK, ID, OR, WA, AZ, MT, ND, SD, UT WY</td>
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<td>L35526</td>
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<td>A and B MAC</td>
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<td>L33943</td>
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<td>CGS Administrators, LLC</td>
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<tr>
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<td>MAC – Part A and B</td>
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<td>IA, IN, KS, MI, MO, NE</td>
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<td>L36523</td>
<td>MolDX: Biomarkers in Cardiovascular Risk Assessment</td>
<td>MAC - Part A and B</td>
<td>Wisconsin Physicians Service Insurance Corporation</td>
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End of Attachment B
**Attachment C - LCD Availability Grid**

**Chemosensitivity and Chemoresistance Assays**

CMS website accessed October 1, 2019

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<th>LCD ID</th>
<th>LCD Title</th>
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<th>Contractor</th>
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<td>DE, DC, MD, NJ, PA</td>
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</tbody>
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End of Attachment C