NEW YORK STATE
MEDICAID PROGRAM

FEE-FOR-SERVICE LABORATORY PROCEDURE CODES AND COVERAGE GUIDELINES MANUAL

Table of Contents

GENERAL INFORMATION AND RULES

1. The fees in the Laboratory Fee Schedule apply to clinical laboratory tests selected from Physician's Current Procedural Terminology (CPT), Professional Edition, 2016 or the Healthcare Common Procedure Coding System (HCPCS), Professional Edition, 2016. Reimbursement is limited to indicated uses of procedures that are FDA approved for in vitro diagnostic use or, are recognized as generally acceptable by the New York State Department of Health. NYS Medicaid Updates for the most current coverage policies can be accessed at the following link: http://www.health.ny.gov/health_care/medicaid/program/update/main.htm

2. The fees include the services of all licensed professionals required by certification in the performance of the test.

3. The fees include all costs related to specimen testing, including collection, storage and transport of specimens, in addition to performance and reporting of results. Unreported instrument controls are not separately reimbursable. **"By Report"** (BR), as indicated in the Fee Schedule, reimbursement requires a statement indicating the need for the service, the type of test performed, test results, the number and source of the specimen(s) and documentation of the laboratory's usual and customary charge to the general public for the service.

4. The fees are for **quantitative** analyses, unless otherwise specified. Mathematical calculations (e.g., calculation of A/G ratio, ionized calcium, free thyroxine index (T 7) or osmolality) are not reimbursable.

5A. Therapeutic drug monitoring is reimbursable when quantitative determination of blood concentration is clinically relevant as a part of a regimen designed to attain and sustain therapeutic effect by maintenance of blood level within a defined range. The intensity and probability of therapeutic or toxic effect must quantitatively correlate with blood concentration. In addition, one or more of the following criteria must be satisfied:

(1) there is a narrow range between those concentrations giving the desired response and those producing toxicity, (2) readily assessed alternative endpoints (e.g., prothrombin time for oral anticoagulants) are lacking or (3) there is large inter individual variability in the absorption and disposition of the drug. Therapeutic monitoring is a covered service only when performed on specimens of blood. Use the drug specific codes 80150 through 80203. Code 80299 is to be used only for drugs, which meet the criteria for therapeutic monitoring, outlined above and are not listed by individual code. Codes 80299 is billable "By Report" and the drug(s) must be specified in the procedure description field on the Claim Form. Peak and trough (or predose and postdose) analyses, when clinically indicated (e.g., aminoglycosides), are reimbursable as two procedures.

5B. NYS Medicaid drug testing policy follows a two-step testing process/structure that consists of the use of screening (presumptive) tests then confirmatory (quantitative) tests. Presumptive drug class screening tests using Common Procedural Terminology (CPT) codes **"80305"**, **"80306"** or **"80307"** are the first step in the process. Only substances that return positive results or are inconclusive on screening tests (presumptive) or results on screening tests that are inconsistent with clinical presentations are reimbursable for confirmation (quantitative) testing using CPT codes **"80321"** through **"80377"** listed on

the fee schedule. **Definitive** or direct confirmation tests using CPT code **"G0480"** are only reimbursable when no screening methods for the substances are available.

Tests for a drug(s) or drug classes must be ordered by the provider and should be considered for inclusion based on the patient´s medical history and/or current clinical presentation. Broad panel tests, reflex tests initiated by the lab, and routine standing orders are not reimbursable. Medical records must support the need for each drug or drug class being tested and must be kept on file, in accordance with regulations, for audit purposes.
https://www.health.ny.gov/health_care/medicaid/program/update/2021/no10_2021-08.htm#drugtest

6A. Certain laboratory procedures are often performed, either manually or on automated equipment, in combination with each other. For purposes of reimbursement, when a code defines a specific combination of procedures performed on a date of service, it is appropriate to utilize that unique code.

6B. When procedures for Vitamin B12 (82607) and Folate (82746 or 82747) are performed in combination, the maximum reimbursable fee for code 82746 or 82747 is $6.25. When a procedure for Ferritin (82728) is performed in combination with Vitamin B12 or Folate, or any of the Organ or Disease Oriented Panels (80048-80076), or any of the individual chemistry analyte codes listed in the fee schedule (see Rule 6A), the maximum reimbursable fee for 82728 is $5.70.

6C. When two or more Hepatitis B tests are performed in combination, reimbursement will be reduced by 50% for each test after the first. See also Rule 16. When Hepatitis A, C or D tests (codes 86692, 86708, 86709, 86803 or 87380) are performed in combination with each other or with any Hepatitis B test, the maximum reimbursable fee per Hepatitis A, C or D test is $5.00. When multiple procedures for antigen or antibody to two or more infectious agents (codes 86602-86689 and 86698-86703 or 86710-86793) are performed in combination, reimbursement is limited to the greater fee plus 50% of the lesser fee(s). The fee for code 86701 Antibody HIV-1 includes reimbursement for up to three screen assays of a single specimen. Use code 87390 for P24 HIV antigen.

7A. For purposes of reimbursement based on the Laboratory Fee Schedule, a complete blood count (CBC) includes a hematocrit, hemoglobin determination, RBC count, RBC indices, WBC count and a platelet count. See code 85027. For a CBC with an automated differential WBC count, use code 85025. **Code 85060 requires interpretation by physician and written report.**

7B. Codes for CBC individual components (85013, 85014, 85018, 85048 and 85049) may not be billed in conjunction with procedure codes including a CBC (85025 and 85027). The code for automated differential WBC count (85004) may not be billed in conjunction with codes 85025 and 85027.

8. For purposes of reimbursement, codes 86850 and 86905 represent examples of procedures considered to be integral parts of outpatient transfusion and hemodialysis services. No separate reimbursement will be allowed.

9. For **pregnancy detection** and where the reported test result is qualitative or semi-quantitative, use code 81025 or 84703. Code 84702 is reimbursable for a quantitative HCG value reported for a diagnostic use (e.g., monitoring post-surgical growth of germ cell neoplasm where quantitative HCG is relative to growth). Code 84702 is not reimbursable for a routine screen for pregnancy.

10. Appropriate billing of antibody and antigen procedures is as follows:

- For antibody or antigen as specific markers of infectious disease, use the most specific code corresponding to the organism's name (e.g., 86618 Antibody; Borrelia burgdorferi) or the disease name (e.g., 87340 Hepatitis B surface antigen).
- For an infectious agent antibody or antigen not listed by name, use the **"By Report"** code for the type of organism (e.g., 86609 Antibody; bacterium not elsewhere specified or the analytical method, e.g., 87299 Infectious agent antigen detection by immunofluorescent technique; not otherwise specified, each organism). Document the name of the organism, and, if applicable, the immunoglobulin subclass(es), on the Claim Form (See Rule 3).
- For antibody other than to infectious agent(s) (e.g., autoantibodies) use the most specific code corresponding to the analyte (e.g., 86376 Microsomal antibody (e.g. thyroid or liver-kidney, each)).
- For non-infectious agent antibody or antigen NOT listed by analyte, use the **most** specific code for the method used (e.g., 86255 Fluorescent **noninfectious** agent antibody; screen each antibody); when billing **"By Report"**, the name of the analyte must be documented on the Claim Form (See Rule 3).
- Multiple tests to detect (1) antibodies to organisms/analytes classified more precisely than the specificity allowed by available codes, (2) antibodies in paired specimens (acute vs. convalescent), or (3) antibodies of different immunoglobulin subclasses, are reimbursable as separate procedures; multiple units of a code (e.g., two units of 86658 for Coxsackie A and B species of enterovirus) may be claimed when analyses yield separately reported results for each subclassification, specimen or Ig subclass.

11. Organ or Disease Orientated Panel codes. Effective July 1, 2000, the panel codes 80047, 80048, 80051, 80053, 80061, 80069 and 80076 should be used to bill designated combinations of tests regardless of whether the tests are ordered and/or performed individually, as a panel, or as multiple panels at different times. If 2 or more panel codes with overlapping component tests, (i.e., 80047, 80048, 80051, 80053, 80076) are billed, the lab is not entitled to reimbursement for the duplicate tests. If one or more of the codes for chemistry tests where this rule applies are billed in combination with another and/or a panel code, total payment due for those chemistry tests is limited as follows: up to 2=$5.03, 3-6=$6.04, 7-9=$7.25, 10-12=$9.09, 13-16=$10.00, 17-18=$11.00, 19 or more=$12.00.

12. Cytogenetic studies codes 88245, 88267 and 88269 must be billed in combination with code 88280 to report a 2-karyotype chromosome analysis as described in the quality control standards for cytogenetic licensure.

13. Reimbursement for immune electrophoresis includes payment for the electrophoretic separation and quantitation. Therefore, no separate reimbursement for code 84165will be allowed when code(s) 86320-86325 are billed.

14.A. **Genetic Testing General Guidance**

The molecular pathology codes (81400 through 81408, 81479 and 84999) are reimbursable for DNA based genetic testing not specifically listed in the fee schedule. All molecular pathology codes (81200 through 81408 and 81479) may be performed as (1) a family study of up to six individuals to determine the genetic carrier/disease status of an individual patient or a fetus as part of a comprehensive program of genetic counseling and when indicated by familial medical history or adjunctive prenatal testing OR (2) an individual study by diagnostic deletion analysis of a patient affected by a genetic disorder. DNA based testing defined under State licensure as investigational for

a certain disease is not reimbursable. Codes 81400 through 81408, 81479 and 84999 are not reimbursable for non-genetic applications such as microbial detection or quantification or testing for acquired changes in genetic material (e.g., T or B cell markers, immunoglobulin heavy or light chain rearrangements associated with malignancy). Reimbursement for these codes should be submitted according to the "By Report" instructions in Rule 3.

B. **Genetic Testing Specific Guidance**

Please note: There has been coding changes for some of the genetic testing policies. Periodically check the *Medicaid Update* Website at the link below for the most recent information.
https://www.health.ny.gov/health_care/medicaid/program/update/main.htm

Whole Exome Sequencing (WES) – WES should be billed using CPT codes 81415 and 81417. NYS Medicaid will reimburse, and consider medically necessary, WES when the member meets the following criteria:

Members 18 years of age and younger are eligible for testing for the evaluation of unexplained neurodevelopmental, neurological, or congenital disorders when all the following criteria are met:

- Clinical presentation and history of the patient suggests a genetic etiology;
- Clinical presentation does not fit a well-defined syndrome;
- Clinical presentation cannot be attributed to an environmental exposure, injury, infection, or other nongenetic etiology;
- Prior genetic testing for specific disorders has failed to yield a diagnosis;
- No additional genetic tests are being ordered concurrently;
- The individual has been evaluated and the test ordered by a physician specializing in clinical genetics or with extensive experience evaluating patients with suspected genetic syndromes; and
- Testing is expected to inform management decisions and/or avoid additional diagnostic tests, which may be unnecessary, expensive, and/or uncomfortable.

WES is the analysis of regions of chromosomal DNA that code for proteins to identify clinically significant mutations. WES will be covered once in a lifetime for NYS Medicaid FFS members and MMC enrollees 18 years of age and younger. However, consideration may be given to members 19 years of age and older if they meet the criteria above and would have benefited from the results of this analysis had it been available when they were younger. WES for fetal screening or diagnosis will not be covered.

Whole genome sequencing (WGS) looks at both the coding and noncoding regions of chromosomal DNA. WGS will not be covered by NYS Medicaid.

The decision to test should be consistent with the current evidence supporting clinically meaningful associations between findings from genetic sequencing and the phenotype under investigation. Expertise in clinical genetics allows for accurate evaluation of patients, determination of whether targeted testing would produce a more cost-effective and higher yield than WES, and interpretation of results for a specific patient.

Documentation should support the benefit of WES, the failure of prior genetic testing to yield a relevant result, and how WES test results may preclude the need for more costly and/or invasive procedures, follow-up, or screening. Information on written informed consent may be found in Section

79-I, Article 7, of NYS Civil Rights Law, on the *New York State Senate* web page, available at https://www.nysenate.gov/legislation/laws/CVR/79-L.

Fragile X - Prenatal carrier testing for fragile X syndrome should be billed using CPT codes 81171, 81172, 81243 and 81244. To verify that a patient meets NYS Medicaid criteria for testing, please visit the August 2014 *Medicaid Update* at the following link:
http://www.health.ny.gov/health_care/medicaid/program/update/2014/2014-08.htm
Diagnostic testing of children for fragile X syndrome continues to be covered if medically necessary.

Spinal Muscular Atrophy (SMA) - Prenatal carrier testing for SMA should be billed using CPT codes 81329, 81336 and 81337. To verify that a patient meets NYS Medicaid criteria for testing, please visit the October 2023 *Medicaid Update* at the following link:
https://www.health.ny.gov/health_care/medicaid/program/update/2023/no15_2023-10.htm .
Carrier screening for SMA of the male partner of a pregnancy will be covered if the pregnant female is found to be a carrier. Diagnostic testing of individuals for SMA continues to be covered if medically necessary.

Trisomy Screening - Non-invasive prenatal screening for trisomy 13, 18 and 21 using cell-free fetal DNA for high-risk singleton pregnancies should be billed using CPT code 81507 or 81420. To verify that a patient meets NYS Medicaid criteria for testing, please visit the October 2014 *Medicaid Update* at the following link: http://www.health.ny.gov/health_care/medicaid/program/update/2014/2014-10.htm. Diagnostic testing (e.g., cytogenetic analysis or molecular genetic testing) for suspected aneuploidies continues to be covered if medically necessary. Micro-deletion testing in conjunction with noninvasive trisomy testing is not reimbursable.

BRCA - Testing for mutations in the BRCA1 and BRCA2 genes of individuals at high risk for hereditary breast and ovarian cancer (HBOC) should be billed using the appropriate code(s): 81162, 81163, 81164, 81165, 81166, 81167, 81212, 81215, 81216, or 81217 if the patient meets NYS Medicaid criteria. Please view the current guidelines which were published in the October 2015 *Medicaid Update* at the following link:
http://www.health.ny.gov/health_care/medicaid/program/update/2015/2015-10.htm

BRCA1 and BRCA2 mutation testing in conjunction with BRCA Large Rearrangement Test (BART) must be billed using CPT code 81162 effective 4/01/2016.

BRCA Large Rearrangement Test (BART) – BART tests for large rearrangement mutations in BRCA genes. If a Medicaid enrollee previously had testing for BRCA1 and BRCA2 genes with negative test results, and Bart testing was not performed, the enrollee may have BART only testing (represented by CPT 81164). The addition of BART testing must be considered medically necessary.

For a Medicaid enrollee where BRCA1 and BRCA2 testing is being ordered for the first time, BART is performed as a reflex test if the BRCA1 and BRCA2 test results are negative. When performing tests for BRCA1 and BRCA2 plus BART, CPT Code 81162 must be billed.

Oncotype DX®, EndoPredict®, Prosigna®, Breast Cancer Index®, and MammaPrint® for Breast Cancer - Oncology (breast), mRNA, gene expression profile testing to aid practitioners in

determining the appropriate use of chemotherapy should be billed using CPT code 81519 for Oncotype DX®, CPT code 81522 for EndoPredict®, CPT code 81520 for Prosigna®, CPT code 81518 for Breast Cancer Index®, or CPT 81521 for MammaPrint®. Only *one* prognostic breast cancer assay is reimbursable per histologically distinct tumor. To verify that a patient meets NYS Medicaid criteria for testing, please visit the December 2023 *Medicaid Update* at the following link: https://www.health.ny.gov/health_care/medicaid/program/update/2023/no17_2023-12.htm.

Lynch Syndrome - Testing for mutations in MLH1 and MSH2 genes of individuals at high risk for Lynch Syndrome and meeting NYS Medicaid criteria should be billed using the following codes: 81292 and 81295. Known mutation or reflex testing may be reimbursable using one the following codes: 81288, 81294, 81297, 81298, 81300, 81317 and 81319. Testing guidelines and criteria for Lynch Syndrome testing can be found in the December 2023 *Medicaid Update* at the following link: https://www.health.ny.gov/health_care/medicaid/program/update/2023/no17_2023-12.htm.

clonoSEQ® - clonoSEQ®, an FDA-cleared in vitro diagnostic (IVD) test, should be billed using CPT 81479. This test is provided to detect measurable residual disease (MRD) in bone marrow from patients with multiple myeloma or B-cell acute lymphoblastic leukemia (B-ALL) and blood or bone marrow from patients with chronic lymphocytic leukemia (CLL).

C. **Pharmacogenetic Testing**

CYP2D6 - Testing for CYP2D6 (cytochrome P450, family 2, subfamily D, polypeptide 6) gene analysis, common variants should be billed using CPT code 81226. NYS Medicaid considers genotyping, once in a lifetime, for CYP2D6 polymorphisms medically necessary to determine drug therapy for the following:
• Patients diagnosed with Huntington's disease requiring doses of Xenazine® (tetrabenzine) greater than 50 mg per day.
• Patients diagnosed with Gaucher disease type 1 requiring Cerdelga® (eliglustat).
At this time, pharmacogenetic testing of CYP2D6 for any purpose other than those specified above is not reimbursable.

CYP2D9 - Testing for CYP2D9 (cytochrome P450, family 2, subfamily C, polypeptide 9) gene analysis, common variants (e.g., *2,*3,*5,*6) should be billed using CPT code 81227. NYS Medicaid considers genotyping, once in a lifetime, for CYP2D9 medically necessary to determine eligibility for MAYZENT® (siponimod) drug therapy.

DMD - Testing of the DMD (dystrophin) (e.g., Duchene/Becker muscular dystrophy) gene should be billed using CPT code 81161. NYS Medicaid considers testing, once in a lifetime, medically necessary to determine eligibility for Exondys 51® (eteplirsen) drug therapy.

BCR/ABL1 - Testing for BCR/ABL1 (t(9;22)) translocation analysis should be billed using CPT code 81170. NYS Medicaid considers BCR/ABL1 testing medically necessary to determine drug therapy for the following:
• Patients diagnosed with chronic myelogenous leukemia (CML) or Acute Lymphoblastic Leukemia (ALL) that have been prescribed Gleevec® (imatinib), Sprycel® (dasatinib), Tasigna® (nilotinib), Bosulif® (bosutinib) or Iclusig® (ponatinib) and one or more of the following:
o have an inadequate initial response to tyrosine kinase inhibitor (TKI) therapy

o exhibit a loss of response (defined as a hematologic or cytogenetic relapse)
o 1-log increase in BCR-ABL1 transcript levels and loss of major molecular response (MMR)
o have disease progression to accelerated or blast phase

PDGFRA - Testing for platelet-derived growth factor receptor, alpha polypeptide (PDGFRA) gene analysis should be billed using CPT code 81314. NYS Medicaid considers PDGFRA testing medically necessary, once in a lifetime, when used to determine drug therapy for the treatment of chronic myeloid leukemia such as Imatinib (Gleevec).

EGFR - Testing for neuroblastoma RAS viral [v-ras] oncogene homolog gene analysis should be billed using CPT code 81311. NYS Medicaid considers EGFR testing medically necessary, once in a lifetime, when used to determine effective drug therapy for medications such as cebtuximab (Erbitux) that treat certain cancers (e.g., lung, colorectal, head and neck) thought to be associated with this genetic mutation.

15. Code 82105, 82106, 82378, 83950, 83951, 84066, 84153, 84154, 84702 or 86316 is reimbursable for an **oncofetal antigen** (tumor marker) procedure used as an adjunctive test with other accepted tests in monitoring for tumor growth recurrence in a patient who has had a tumor irradiated or surgically removed. Codes 82105 and 82106 are also reimbursable for alpha-fetoprotein testing used for prenatal (nondiagnostic) gestational age dependent screening for neural tube defects. Code 86316 for immunoassay for a tumor antigen not elsewhere specified, e.g., CA 50, is billable **"By Report"**. When a procedure for (CEA) carcinoembryonic antigen (82378) is performed in combination with Comprehensive Metabolic Panel (code 80053) the maximum reimbursable fee for code 82378 is $8.00. A test for an oncofetal antigen (tumor marker) is reimbursable for diagnostic purposes only when used in accordance with the FDA approval criteria for its use. When 84153 and 84152 or 84154 are billed in combination, the maximum fee for 84152 or 84154 is $21.35.

16. Claims for reimbursement for procedures generally considered to be follow-up testing must be supported by reporting a specific (presumptive) diagnosis which considers the results of the initial test(s) as well as the patient's history, symptoms, etc. The ordering practitioner must supply such diagnosis, or reason for the patient encounter, to the laboratory. For example:

- Code 82172 is reimbursable when performed for diagnostic purposes for a patient with documented elevated total cholesterol (>240 mg/dl) and an abnormally low HDL cholesterol level (< 35 mg/dl) and/or documented family history of coronary artery disease (CAD). A test for apolipoprotein(s) is **not** reimbursable when used as a **screening** procedure for CAD risk assessment.
- Thyroid function tests other than "screen" tests for clinically suspected thyroid dysfunctions are reimbursable only when indicated for differential diagnosis, to resolve disagreement with documented clinical impressions, to resolve equivocal results or to monitor therapeutic regimens of diagnosed thyroid-dysfunctional patients. For purposes of this rule, a "screen" test is either total thyroxine (84436) or free thyroxine index (84436 + 84479) or sensitive-TSH (84443).
- Serologic markers that are clinically indicated for staging, management or prognosis of viral hepatitis B are reimbursable only when it is determined by initial diagnostic testing that the patient has type B hepatitis.

17. The fee for presumptive identification of microbial culture isolates includes reimbursement for all procedures used to presumptively identify the organism, including stains. When definitive identification is medically necessary and additional methods are used for definitive identification, (e.g., molecular methods) use code 87076 or 87077, as applicable, in addition to the appropriate code for isolation (87040 - 87075).

18. Lymphocyte evaluation by immunophenotyping is reimbursable for analysis of lymphocyte subpopulations for monitoring of disease activity and therapeutic response in, for example, immunodeficiency or autoimmune disease, or cancer. Only those antibodies or "markers" FDA approved or cleared and/or approved by the Department are reimbursable as follows:

- Bill 1 unit of code 86360 when the lab performs an "abbreviated lymphocyte" analysis panel* by 2 color flow cytometric analysis or any acceptable tube combination out of the possible four analysis tubes by 3 or 4-color flow cytometric analysis, and reports absolute CD4 counts with CD8 counts;
- Bill 2 units of code 86360 when the lab performs a "full lymphocyte" analysis panel* by 2, 3 or 4 color flow cytometric analysis and reports absolute CD4 counts with CD8 counts. Codes 86355, 86357, 86359, 88184, 88185 and 88187 through 88189 are not reimbursable for a 'full lymphocyte' analysis panel when only performing absolute CD4 counts with CD8 counts;
- Bill 1 unit of code 86361 when the lab performs lymphocyte subpopulation counts by a method other than flow cytometry or microscopy, and reports only absolute CD4 counts with or without CD8 counts;
- Bill 1 unit of one or more of the codes 86355, 86357, 86359, 86367, 88184 and whenever appropriate, 1 or more units of 88185, when the lab performs flow cytometric testing using multiple markers (e.g. lymphoma/leukemia testing). When CD4/CD8 analysis is included, 1 unit of 86360 should be billed in addition, and when CD4 analysis is included (without CD8), bill 1 unit of 86361 in addition. Codes 86360 and 86361 may not be billed for the same date of service. 88184 and 88185 should be used for unlisted markers, including markers used to draw gates, set cursors and monitor variability. Bill 1 unit of the appropriate interpretation code (88187 through 88189) based on the total number of markers performed;
- Bill code 88346 or 88350 when the lab performs microscopic or other non-flow cytometric subset analysis using tagged antibody(ies); bill 1 unit of code 88346 or 88350 per marker.

* "Abbreviated lymphocyte" and "full lymphocyte" panels are as defined by the New York State Cellular Immunology Proficiency Testing Program.

19. Code **86341 Islet cell antibody** is reimbursable when used to differentiate type I from type II diabetes in patients with equivocal clinical presentation. It is not reimbursable when used as a predicator of disease, e.g., in first-degree relatives of persons with diabetes mellitus.

Laboratory Procedure Codes

20. Code **87536 HIV-1 quantitation** is reimbursable when used in patient management to predict clinical outcomes, to predict risk of disease progression, and/or to provide information for a decision to initiate antiretroviral drug therapy or to change treatment regimes. This test is allowed as clinically indicated up to a maximum of six per year.

21. HIV genotypic/phenotypic drug resistance testing and phenotypic prediction using genotypic comparison to known databases is a covered service when clinically indicated. Medicaid will

reimburse each test (87900, 87901, 87903, 87904, 87906) up to a maximum of three times in a 365-day period across all providers. NYS Medicaid will reimburse for any combination of 87901 and 87903 up to a maximum of four times in a 365-day period across all providers.
Code 87903 reimburses $675.29 for resistance determinations of up to 10 antiviral drugs. Code 87904 should be billed in addition to 87903 to claim reimbursement for additional drug resistance determinations, using one unit **for each (1) additional drug.**

When codes 87901, 87903 and 87906 are billed in combination with the same date of service, the maximum reimbursable fee for any combination of 87901, 87903 and 87906 is $100 less than the additive maximum fees for the codes.

22. For instrumented screening of PAP smears (codes 88174 and 88175), the following definitions apply:

- For code 88174, "screening by automated system" means primary examination by a slide profiling system without human review and primary examination by human review of all fields of vision selected by a locations-guidance system, with or without quality assurance manual or automated re-screening.
- For code 88175, "screening by automated systems and manual rescreening" means primary examination by human review of all or some fields of vision selected by a location guidance system, and, in addition, full slide review (e.g., AutoScan mode engaged), with or without quality assurance manual or automated rescreening.

23. Effective September 1, 2004, travel expenses associated with in-home phlebotomy services, i.e., blood draws, are reimbursable using code P9604. The recipient must be eligible for in-home phlebotomy as documented by a qualified ordering practitioner and defined below.

A recipient is eligible for in-home phlebotomy if:

- The recipient is homebound, which means he or she has a condition due to illness or injury that precludes access to routine medical services outside of his/her residence without special arrangements for transportation, i.e., ambulance, ambulette, and taxi with assistance in areas where public transportation is unavailable; or has a condition that makes leaving the residence medically contraindicated; ***and***
- The recipient is participating in a Medicaid-covered home care program or is currently receiving a Medicaid-covered home care service, i.e., personal care services, certified home health agency (CHHA) services, consumer-directed personal assistance services, or the Long-Term Home Health Care Program (LTHHCP).

Travel expenses are NOT a covered service if they are solely to:

- Draw blood from patients in a skilled nursing facility;
- Draw blood from a recipient who receives medical services in his or her residence from a professional whose scope of practice authorizes the drawing of blood; or,
- Pick-up and transport a specimen collected by a home health care provider or anyone other than a laboratory representative.

The laboratory is entitled to only one fee for one-way or round-trip travel to a single address, regardless of the number of specimens collected or the number of recipients drawn at that location. There is a limit of 12 claims per recipient per year for in-home phlebotomy service; this allows for 12 round-trips or 12 one-way trips, or any combination of no more than 12 round or one-way trips. The number of specimens collected per trip must be documented.

To calculate the appropriate reimbursement amount for claiming travel to and from in-home phlebotomy services, multiply the number of trips or stops (including the return trip to the laboratory) by the fee and divide this amount by the number of patients seen. The laboratory will pro-rate when the claim is submitted based on the number of patients seen on that trip. The "same address" is defined as a building or complex with the same entrance and egress off of a public road, such as an apartment complex.

Rules for billing, including pro-rating for multiple recipients:

1. **One recipient at one site**: A laboratory representative travels from the laboratory to the home of one recipient and returns to the laboratory without making any other stops. The trip out and back is paid as a round-trip. The laboratory should submit a single line claim for **$18.70** (2 x $9.35 = $18.70).

2. **One recipient at each of multiple sites**: A laboratory representative travels in a circuit from the laboratory to the home of each of six recipients and returns to the laboratory. Each segment is paid as a one-way trip at a flat rate of $9.35. The laboratory is entitled to a total of $65.45 (7 x $9.35 = $65.45) but, since a separate claim must be submitted for each recipient, $65.45 must be divided by the number of recipients, which is six. Each of the six recipient claims would be submitted for **$10.91**.

3. **Multiple recipients at a single address**: A laboratory representative travels from the laboratory to an apartment complex, draws blood from six recipients and returns to the laboratory. The laboratory is entitled to one round trip fee of $18.70, but, since a separate claim must be submitted for each recipient, the $18.70 must be divided by the number of recipients, which is six. Each of the six recipients' claims would be submitted for **$3.12**.

4. **Multiple recipients at one address + one recipient at each of several additional sites**: A laboratory representative travels from the laboratory to an apartment complex and draws blood from three recipients; he then continues his circuit to three separate residences, and draws blood from one recipient at each, and returns to the laboratory.

The laboratory should bill as follows:
The laboratory is entitled to $9.35 for the trip segment from the laboratory to the apartment complex; For each of the three recipients drawn at separate addresses, the laboratory is entitled to $9.35 trip segment. The laboratory is also entitled to $9.35 for the return to the laboratory. The total would be four times $9.35, or $37.40.
The total number of stops are 5 (one stop from the laboratory to the apartment complex, stops at three recipients' homes and the return trip to the laboratory). The laboratory is entitled to a total of $46.75 (5 x $9.35 = $46.75), but since a separate claim must be submitted for each recipient, $46.75 must be divided by the number of recipients which is six. Each of the six recipient's claims would be submitted for $7.79.

24. The Medicaid definition for "date of service" for laboratory providers is the date of specimen collection. For laboratory tests that use a specimen taken from storage, the date of service is the date the specimen was removed from storage.

25. NCCI Modifiers:

Note- NCCI associated modifiers are recognized for NCCI code pairs/related edits. For additional information please refer to the CMS website: http://www.cms.hhs.gov/NationalCorrectCodInitEd/

-59 Distinct procedural service
-91 Repeat clinical diagnostic laboratory test

26. Organic Acid Codes **83918**, **83919**, and **83921** will be reimbursable by NYS Medicaid for members aged 20 years and older with limited diagnoses that relate to acute porphyria, epilepsy, inborn errors of metabolism, mitochondrial myopathies, dementia, transcobalamin II deficiency, and biotin dependent carboxylase deficiency.

21. HIV genotypic/phenotypic drug resistance testing and phenotypic prediction using genotypic comparison to known databases is a covered service when clinically indicated. Medicaid will reimburse each test (87900, 87901, 87903, 87904, 87906) up to a maximum of three times in a 365-day period across all providers. NYS Medicaid will reimburse for any combination of 87901 and 87903 up to a maximum of four times in a 365-day period across all providers.
Code 87903 reimburses $675.29 for resistance determinations of up to 10 antiviral drugs. Code 87904 should be billed in addition to 87903 to claim reimbursement for additional drug resistance determinations, using one unit **for each (1) additional drug.**

*******CODES MAY BE OUT OF NUMERICAL SEQUENCE- SEE CPT CODEBOOK*******

ORGAN OR DISEASE ORIENTED PANELS (see Rule 11)

CODE	DESCRIPTION
80047	Basic metabolic panel (Calcium, ionized) This panel must include the following: Calcium, ionized (82330), Carbon dioxide (82374), Chloride (82435), Creatinine (82565), Glucose (82947), Potassium (84132), Sodium (84295), Urea Nitrogen (BUN) (84520)
80048	Basic metabolic panel (Calcium, total) This panel must include the following: Calcium, total (82310), Carbon dioxide (82374), Chloride (82435), Creatinine (82565), Glucose (82947), Potassium (84132), Sodium (84295), Urea Nitrogen (BUN) (84520)
80051	Electrolyte panel This panel must include the following: Carbon dioxide (82374), Chloride (82435), Potassium (84132), Sodium (84295)
80053	Comprehensive metabolic panel This panel must include the following: Albumin (82040), Bilirubin, total (82247), Calcium, total (82310), Carbon dioxide (bicarbonate) (82374), Chloride (82435), Creatinine (82565), Glucose (82947), Phosphatase, alkaline (84075), Potassium (84132), Protein, total (84155), Sodium (84295), Transferase, alanine amino (ALT) (SGPT) (84460), Transferase, aspartate amino (AST) (SGOT) (84450), Urea Nitrogen (BUN) (84520)
80061	Lipid panel

This panel must include the following:
Cholesterol, serum, total (82465), Lipoprotein, direct measurement, high density cholesterol (HDL cholesterol) (83718), Triglycerides (84478)

80069 Renal function panel
This panel must include the following:
Albumin (82040), Calcium, total (82310), Carbon dioxide (bicarbonate) (82374), Chloride (82435), Creatinine (82565), Glucose (82947), Phosphorus, inorganic (phosphate) (84100), Potassium (84132), Sodium (84295), Urea nitrogen (BUN) (84520)

80076 Hepatic function panel
This panel must include the following:
Albumin (82040), Bilirubin, total (82247), Bilirubin, direct (82248), Phosphatase, alkaline (84075), Protein, total (84155), Transferase, alanine amino (ALT) (SGPT) (84460), Transferase, aspartate amino (AST) (SGOT) (84450)

THERAPEUTIC DRUG ASSAYS

Quantitative therapeutic drug monitoring is reimbursable only when performed on specimens of **blood** as outlined in Rule 5A.

CODE	DESCRIPTION
80145	Adalimumab
80150	Amikacin
80151	Amiodarone
80156	Carbamazepine; total
80157	free
80161	-10, 11-epoxide
80158	Cyclosporine
80159	Clozapine
80162	Digoxin; total
80163	free
80168	Ethosuximide
80169	Everolimus
80167	Felbamate
80181	Flecainide
80171	Gabapentin, whole blood, serum, or plasma
80170	Gentamicin
80173	Haloperidol
80230	Infliximab
80235	Lacosamide
80175	Lamotrigine
80193	Leflunomide
80177	Levetiracetam

80178	Lithium
80204	Methotrexate
80180	Mycophenolate (mycophenolic acid)
80183	Oxcarbazepine
80184	Phenobarbital
80185	Phenytoin; total
80186	free
80187	Posaconazole
80188	Primidone
80194	Quinidine
80210	Rufinamide
80220	hydroxychloroquine
80195	Sirolimus
80197	Tacrolimus
80198	Theophylline
80199	Tiagabine
80200	Tobramycin
80164	Valproic acid (dipropylacetic acid); total
80165	free
80202	Vancomycin
80280	Vedolizumab
80285	Voriconazole
80203	Zonisamide
80299	Quantitation of therapeutic drug, not elsewhere specified (see Rule 5A)

PRESUMPTIVE DRUG CLASS SCREENING

DEFINITIVE DRUG TESTING

CODE	DESCRIPTION
80305	Drug test(s), presumptive, any number of drug classes, any number of devices or procedures; capable of being read by direct optical observation only (e.g., utilizing immunoassay [e.g., dipsticks, cups, cards, or cartridges]) includes sample validation when performed, per date of service
80306	read by instrument assisted direct optical observation (e.g., utilizing immunoassay [e.g., dipsticks, cups, cards, or cartridges]), includes sample validation when performed, per date of service
80307	by instrument chemistry analyzers (e.g., utilizing immunoassay [e.g., EIA, ELISA, EMIT, FPIA, IA, KIMS, RIA]), chromatography (e.g., GC, HPLC), and mass spectrometry either with or without chromatography, (e.g., DART, DESI, GC MS, GC-MS/MS, LC-MS, LC-MS/MS, LDTD, MALDI, TOF) includes sample validation when performed, per date of service
80320	Alcohols

80323	Alkaloids, not otherwise specified
80324	Amphetamines; 1 or 2
80325	3 or 4
80326	5 or more
80335	Antidepressants, tricyclic, and other cyclicals; 1 or 2
80336	3-5
80337	6 or more
80345	Barbiturates
80346	Benzodiazepines; 1-12
80347	13 or more
80348	Buprenorphine
80349	Cannabinoids, natural
80350	Cannabinoids, synthetic; 1-3
80351	4-6
80352	7 or more
80353	Cocaine
80354	Fentanyl Level
80356	Heroin metabolite
80358	Methadone
80359	Methylenedioxyamphetamines (MDA, MDEA, MDMA)
80361	Opiates, 1 or more
80362	Opioids and opiate analogs; 1 or 2
80363	3 or 4
80364	5 or more
80365	Oxycodone
80367	Propoxyphene

EVOCATIVE/SUPPRESSION TESTING

The following tests involve the administration of evocative or suppressive agents and the baseline and subsequent measurement of their effects on chemical constituents. The costs of the evocative or suppressive agents are not included in the fee, with the exception of oral glucose for codes 80430 and 82950 – 82953. Reference to a particular analyte in the code description (e.g., cortisol x 2) indicates the minimum number of times that particular analysis must be performed in order to claim reimbursement for the test. When multiple evocative or suppressive tests are performed in combination reimbursement is limited to the greater fee plus 50% of the lesser fee(s).

CODE	**DESCRIPTION**
80400	ACTH stimulation panel; for adrenal insufficiency (cortisol x 2)
80402	for 21 hydroxylase deficiency (cortisol x 2 and 17 hydroxyprogesterone x 2)
80406	for 3 beta-hydroxydehydrogenase deficiency (cortisol x 2 and 17 hydroxypregnenolone x 2)
80410	Calcitonin stimulation panel (e.g., calcium, pentagastrin) (calcitonin x 3)
80414	Chorionic gonadotropin stimulation panel; testosterone response (testosterone x 2)

80415 estradiol response (estradiol x 2)
80416 Renal vein renin stimulation panel (e.g., captopril) (renin x 6)
80420 Dexamethasone suppression panel, 48 hour (free cortisol/urine x 2 and cortisol x 2)
80426 Gonadotropin releasing hormone stimulation panel (follicle stimulating hormone (FSH) x 4 and luteinizing hormone (LH) x 4)
80428 Growth hormone stimulation panel (e.g., arginine infusion, l-dopa administration) (human growth hormone (HGH) x 4)
80430 Growth hormone suppression panel (includes glucose) (glucose x 3 and human growth hormone (HGH) x 4)
80432 Insulin-induced C-peptide suppression panel (insulin x 1 and C-peptide x 5 and glucose x 5)
80436 Metyrapone panel (cortisol x 2 and 11-deoxycortisol x 2)
80438 Thyrotropin releasing hormone (TRH) stimulation panel; 1 hour (thyroid stimulating hormone (TSH) x 3)

URINALYSIS

CODE	DESCRIPTION
81000	Urinalysis, by dip stick or tablet reagent for bilirubin, glucose, hemoglobin, ketones, leukocytes, nitrite, ph, protein, specific gravity, urobilinogen, any number of these constituents; non-automated, with microscopy
81001	automated, with microscopy
81002	non-automated, without microscopy
81003	automated, without microscopy
81007	bacteriuria screen, except by culture or dipstick
81015	microscopic only
81025	Urine pregnancy test, by visual color comparison methods

MOLECULAR PATHOLOGY

CODE	DESCRIPTION
81170	ABL1 (ABL proto-oncogene 1, non-receptor tyrosine kinase) (e.g., acquired imatinib tyrosine kinase inhibitor resistance), gene analysis, variants in the kinase domain
81171	*AFF2 (AF4/FMR2 family member2 [FMR2])*(e.g. fragile X mental retardation 2 [FRAXE]) gene analysis; evaluation to detect abnormal (e.g., expanded) alleles
81172	characterization of alleles (e.g., expanded size and methylation status
81201	APC (adenomatous polyposis coli) (e.g., familial adenomatosis polyposis [FAP], attenuated FAP) gene analysis; full gene sequence
81202	known familial variants
81203	duplication/deletion variants
81204	*AR (androgen receptor)*(e.g., spinal and bulbar muscular atrophy, Kennedy disease, X chromosome inactivation) gene analysis; characterization of alleles (e.g., expanded size

or methylation status)

81173 full gene sequence

81174 known familial variant

81200 ASPA (aspartoacylase) (e.g., Canavan disease) gene analysis, common variants (e.g., E285A, Y231X)

81177 *ATN1 (atrophin 1)* (e.g., dentatorubral-pallidoluysian atrophy) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles

81178 *ATXN1 (ataxin 1)* (e.g., spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles

81179 *ATXN2 (ataxin 2)* (e.g., spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles

81180 *ATXN3 (ataxin 3)* (e.g., spinocerebellar ataxia, Machado-Joseph disease) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles

81181 *ATXN7 (ataxin 7)* (e.g., spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles

81182 *ATXN8OS (ATXN8 opposite strand [non-protein coding])* (e.g., spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles

81183 *ATXN10 (ataxin 10)* (e.g., spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles

81205 BCKDHB (branched-chain keto acid dehydrogenase E1, beta polypeptide) (e.g., maple syrup urine disease) gene analysis, common variants (e.g., R183P, G278S, E422X)

81206 BCR/ABL1 (t(9;22)) (e.g., chronic myelogenous leukemia) translocation analysis; major breakpoint, qualitative or quantitative

81207 minor breakpoint, qualitative or quantitative

81208 other breakpoint, qualitative or quantitative

81209 BLM (Bloom syndrome, RecQ helicase-like) (e.g., Bloom syndrome) gene analysis, 2281del6ins7 variant

81210 BRAF (B-RAF proto-oncogene, serine/threonine kinase) (e.g., colon cancer, melanoma), gene analysis, V600 variant(s)

81162 BRCA1 (BRCA1, DNA repair associated), BRCA2 (BRCA2, DNA repair associated) (e.g., hereditary breast and ovarian cancer) gene analysis; full sequence analysis and full duplication/deletion analysis (i.e., detection of large gene rearrangements)

81163 full sequence analysis

81164 full duplication/deletion analysis (i.e., detection of large gene rearrangements)

81212 185delAG, 5385insC, 6174delT variants

81165 BRCA1 (BRCA1, DNA repair associated) (e.g., hereditary breast and ovarian cancer) gene analysis; full sequence analysis

81166 full duplication/deletion analysis (i.e., detection of large gene rearrangements)

81215 known familial variant

81216 BRCA2 (BRCA2, DNA repair associated) (e.g., hereditary breast and ovarian cancer) gene analysis; full sequence analysis

81167 full duplication/deletion analysis (i.e., detection of large gene rearrangements)

81217 known familial variant

81233 *BTK (Bruton's tyrosine kinase)*(e.g., chronic lymphocytic leukemia) gene analysis, common variants (e.g., C481S, C481R, C481F)

81184 *CACNA1A (calcium voltage-gated channel subunit alpha 1A)* (e.g., spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles

81185 full gene sequence

81186 known familial variant

81168 CCND1/IGH (t(11;14)) (e.g., mantle cell lymphoma) translocation analysis, major breakpoint, qualitative and quantitative, if performed

81218 CEBPA (CCAAT/enhancer binding protein [C/EBP], alpha) (e.g. acute myeloid leukemia), gene analysis, full gene sequence

81220 CFTR (cystic fibrosis transmembrane conductance regulator) (e.g., cystic fibrosis) gene analysis; common variants (e.g., ACMG/ACOG guidelines)

81221 known familial variants

81222 duplication/deletion variants

81223 full gene sequence

81224 intron 8 poly-T analysis (e.g., male infertility)

81187 *CMBP (CCHC-type zinc finger nucleic acid binding protein)* (e.g., myotonic dystrophy type 2) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles

81188 *CSTB (cystatin B)*(e.g., Unverricht-Lunborg disease) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles

81189 full gene sequence

81190 known familial variant

81226 CYP2D6(cytochrome P450, family2, subfamily D, polypeptide 6) (e.g., drug metabolism), gene analysis, common variants (e.g.,*2,*3,*4,*5,*6,*9,*10,*17,*19,*29,*35,*41,*1XN,*2XN,*4XN)

81227 CYPC19(cytochrome P450, family 2, subfamily C, polypeptide 9) (e.g., drug metabolism), gene analysis, common variants (e.g.,*2,*3,*5,*6)

81228 Cytogenomic (genome-wide) analysis for constitutional chromosomal abnormalities; interrogation of genomic regions for copy number variants, comparative genomic hybridization (CGH) microarray analysis

81229 interrogation of genomic regions for copy number and single nucleotide polymorphism (SNP) variants, comparative genomic hybridization (CGH) microarray analysis

81161 DMD (dystrophin) (e.g., Duchenne/Becker muscular dystrophy) deletion analysis, and duplication analysis, if performed

81234 *DMPK (DM1 protein kinase)*(e.g., myotonic dystrophy type 1) gene analysis; evaluation to detect abnormal (expanded) alleles

81239 characterization of alleles (e.g., expanded size)

81232 DPYD (dihydropyrimidine dehydrogenase) (e.g., 5-fluorouracil/5-FU and capecitabine drug metabolism), gene analysis, common variant(s) (e.g., *2A, *4, *5, *6)

81235 EGFR (epidermal growth factor receptor) (e.g., non-small cell lung cancer) gene analysis, common variants (e.g., exon 19 LREA deletion, L858R, T790M, G719A, G719S, L861Q)

81236 *EZH2 (enhancer of zeste 2 polycomb repressive complex 2 subunit)* (e.g., myelodysplastic syndrome, myeloproliferative disease) gene anlaysis, full gene sequence

81237 *EZH2 (enhancer of zeste 2 polycomb repressive complex 2 subunit)* (e.g., diffuse large B-cell lymphoma) gene analysis, common variant(s) (e.g., codon 646)

81240 F2 (prothrombin, coagulation factor ii) (e.g., hereditary hypercoagulability) gene analysis, 20210G>A variant

81241 F5 (coagulation factor V) (e.g., hereditary hypercoagulability) gene analysis, Leiden variant

81238 F9 (coagulation factor IX) e.g., hemophilia B), full gene sequence

81242 FANCC (Fanconi anemia, complementation group C) (e.g., Fanconi anemia, type C) gene analysis, common variant (e.g., IVS4+4A>T)

81245 FLT3 (fms-related tyrosine kinase 3) (e.g., acute myeloid leukemia), gene analysis; internal tandem duplication (ITD) variants (i.e., exons 14, 15)

81246 tyrosine kinase domain (TKD) variants (e.g., D835, I836)

81243 FMR1 (fragile X mental retardation 1) (e.g., fragile X mental retardation) gene analysis; evaluation to detect abnormal (e.g., expanded) alleles

81244 characterization of alleles (e.g., expanded size and promoter methylation status)

81284 *FXN (frataxin)*(e.g., Friedreuch ataxia) gene analysis; evaluation to detect abnormal (expanded) alleles

81285 characterization of alleles (e.g., expanded size)

81286 full gene sequence

81289 known familial variants

81250 G6PC (glucose-6-phosphatase, catalytic subunit) (e.g., Glycogen storage disease, type 1a, von Gierke disease) gene analysis, common variants (e.g., R83C, Q347X)

81248 known familial variant(s)

81249 full gene sequence

81251 GBA (glucosidase, beta, acid) (e.g., Gaucher disease) gene analysis, common variants (e.g., N370S, 84GG, L444P, IVS2+1G>A)

81252 GJB2 (gap junction protein, beta 2, 26kDa; connexin 26) (e.g., nonsyndromic hearing loss) gene analysis; full gene sequence

81253 known familial variants

81254 GJB6 (gap junction protein, beta 6, 30kDa, connexin 30) (e.g., nonsyndromic hearing loss) gene analysis, common variants (e.g., 309kb [del(GJB6-D13S1830)] and 232kb [del(GJB6-D13S1854)])

81257 HBA1/HBA2 (alpha globin 1 and alpha globin 2) (e.g., alpha thalassemia, HB bart hydrops fetalis syndrome, HbH disease), gene analysis; common deletions or variant (e.g., Southeast Asian, Thai, Filipino, Mediterranean, alpha3.7, alpha4.2, alpha20.5, Constant spring)

81258 known familial variant

81259 full gene sequence

81269 duplication/deletion variants

81361 HBB (hemoglobin, subunit beta) (e.g., sickle cell anemia, beta thalassemia, hemoglobinopathy); common variant(s) (e.g., HbS, HbC, HbE)

81362 known familial variant(s)

81363 duplication/deletion variant(s)

81364 full gene sequence

81255 HEXA (hexosaminidase A [alpha polypeptide]) (e.g., Tay-Sachs disease) gene analysis, common variants (e.g., 1278insTATC, 1421+1G>C, G269S)

81271 *HTT (huntingtin)* (e.g., Huntington disease) gene analysis; evaluation to detect abnormal (e.g., expanded) alleles

81274 characterization of alleles (e.g., expanded size)

81278 IGH@/BCL2 (t(14;18)) (e.g., follicular lymphoma) translocation analysis, major breakpoint
region (MBR) and minor cluster region (mcr) breakpoints, qualitative or quantitative

81260 IKBKAP (inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase complex-associated protein) (e.g., familial dysautonomia) gene analysis, common variants (e.g., 2507+6T>C, R696P)

81279 JAK2 (Janus kinase 2) (e.g., myeloproliferative disorder) targeted sequence analysis (e.g., exons 12 and 13)

81275 KRAS (Kirsten rat sarcoma viral oncogene homolog) (e.g., carcinoma) gene analysis; variants in exon 2 (e.g., codons 12 and 13)

81276 additional variant(s) (e.g., codon 61, codon 146)

81290 MCOLN1 (mucolipin 1) (e.g., Mucolipidosis, type IV) gene analysis, common variants (e.g., IVS3-2A>G, del6.4kb)

81302 MECP2 (methyl cpg binding protein 2) (e.g., Rett syndrome) gene analysis; full sequence analysis

81303 known familial variant

81304 duplication/deletion variants

81287 MGMT (0-6 methylguanine-DNA methyltransferase) (e.g., glioblastoma multiforme) promoter methylation analysis

81301 Microsatellite instability analysis (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) of markers for mismatch repair deficiency (e.g., BAT25, BAT26), includes comparison of neoplastic and normal tissue, if performed

81292 MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis

81293 known familial variants

81294 duplication/deletion variants

81338 MPL (MPL proto-oncogene, thrombopoietin receptor) (e.g., myeloproliferative disorder) gene analysis; common variants (e.g., W515A, W515K, W515L, W515R)

81339 sequence analysis, exon 10

81288 MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (e.g., hereditary nonpolyposis colorectal cancer, Lynch syndrome) gene analysis; promoter methylation

81295 MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis

81296 known familial variants
81297 duplication/deletion variants
81298 MSH6 (mutS homolog 6 [E. coli]) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis
81299 known familial variants
81300 duplication/deletion variants
81305 *MYD88 (myeloid differentiation primary response 88)* (e.g., Waldenstrom's macroglobulinemia, lymphoplasmacytic leukemia) gene analysis, pLeu265Pro (L265P) variant
81310 NPM1 (nucleophosmin) (e.g., acute myeloid leukemia) gene analysis, exon 12 variants
81311 NRAS (neuroblastoma RAS viral [v-ras] oncogene homolog) (e.g., colorectal carcinoma), gene analysis, variants in exon 2 (e.g., codons 12 and 13) and exon 3 (e.g., codon 61)
81191 NTRK1 (neurotrophic receptor tyrosine kinase 1) (e.g., solid tumors) translocation analysis
81192 NTRK2 (neurotrophic receptor tyrosine kinase 2) (e.g., solid tumors) translocation analysis
81193 NTRK3 (neurotrophic receptor tyrosine kinase 3) (e.g., solid tumors) translocation analysis
81194 NTRK (neurotrophic receptor tyrosine kinase 1, 2, and 3) (e.g., solid tumors) translocation analysis
81312 *PABPN1 (ply[A] binding protein nuclear 1)* (e.g., oculopharyngeal muscular dystrophy) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles
81307 PALB2 (partner and localizer of BRCA2) full sequence analysis
81308 known familial variant
81309 PIK3CA (e.g., colorectal and breast cancer partner and localizer of BRCA2) targeted sequence analysis
81320 *PLCG2 (phospholipase C gamma 2)* (e.g., chronic lymphocytic leukemia) gene analysis, common variants (e.g., R665W, S707Fm L845F)
81314 PDGFRA (platelet-derived growth factor receptor, alpha polypeptide) (e.g., gastrointestinal stromal tumor [GIST]), gene analysis, targeted sequence analysis (e.g., exons 12, 18)
81315 PML/RARalpha, (t (15;17)), (promyelocytic leukemia/retinoic acid receptor alpha) (e.g., promyelocytic leukemia) translocation analysis; common breakpoints (e.g., intron 3 and intron 6), qualitative or quantitative
81316 single breakpoint (e.g., intron 3, intron 6 or exon 6), qualitative or quantitative
81317 PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis
81318 known familial variants
81319 duplication/deletion variants
81343 *PPP2R2B (protein phosphatase 2 regulatory subunit Bbeta)* (e.g., spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles

81321 PTEN (phosphatase and tensin homolog) (e.g., Cowden syndrome, PTEN hamartoma tumor syndrome) gene analysis; full sequence analysis

81322 known familial variant

81323 duplication/deletion variant

81332 SERPINA1 (serpin peptidase inhibitor, clade A, alpha-1 antiproteinase, antitrypsin, member 1) (e.g., alpha-1-antitrypsin deficiency), gene analysis, common variants (e.g., *S and *Z)

81347 SF3B1 (splicing factor [3b] subunit B1) (e.g., myelodysplastic syndrome/acute myeloid leukemia) gene analysis, common variants (e.g., A672T, E622D, L833F, R625C, R625L)

81329 *SMN1 (survival of motor neuron 1, telomeric)* (e.g., spinal muscular atrophy) gene analysis; dosage/deletion analysis (e.g., carrier testing), includes *SNM2 (survival of motor neuron 2, centromeric)* analysis, if performed

81336 full gene sequence

81337 known familial sequence variant(s)

81330 SMPD1(sphingomyelin phosphodiesterase 1, acid lysosomal) (e.g., Niemann-Pick disease, Type A) gene analysis, common variants (e.g., R496L, L302P, fsP330)

81331 SNRPN/UBE3A (small nuclear ribonucleoprotein polypeptide N and ubiquitin protein ligase E3A) (e.g., Prader-Willi syndrome and/or Angelman syndrome), methylation analysis

81348 SRSF2 (serine and arginine-rich splicing factor 2) (e.g., myelodysplastic syndrome, acute
myeloid leukemia) gene analysis, common variants (e.g., P95H, P95L)

81349 Genome-wide microarray analysis for copy number and loss-of-heterozygosity variants

81344 *TPA (TATA box binding protein)* (e.g., spinocerebellar ataxia) gene analysis, evaluation to detect abnormal (e.g., expanded) alleles

81345 *TERT (telomerase reverse transcriptase)* (e.g., thyroid carcinoma, glioblastoma multiforme) gene analysis, targeted sequence analysis (e.g., promotor region)

81351 TP53 (tumor protein 53) (e.g., Li-Fraumeni syndrome) gene analysis; full gene sequence

81352 targeted sequence analysis (e.g., 4 oncology)

81353 known familial variant

81335 TPMT (thiopurine S-methyltransferase) (e.g., drug metabolism), gene analysis, common variants (e.g., *2, *3)

81346 TYMS (thymidylate synthetase) (e.g., 5-fluorouracil/5-FU drug metabolism), gene analysis, common variant(s) (e.g., tandem repeat variant)

81357 U2AF1 (U2 small nuclear RNA auxiliary factor 1) (e.g., myelodysplastic syndrome, acute
myeloid leukemia) gene analysis, common variants (e.g., S34F, S34Y, Q157R, Q157P)

81350 UGT1A1 (UDP glucuronosyltransferase 1 family, polypeptide A1) (e.g., irinotecan metabolism), gene analysis, common variants (e.g., *28, *36, *37)

81355 VKORC1 (vitamin k epoxide reductase complex, subunit 1) (e.g., warfarin metabolism), gene analysis, common variant(s) (e.g. -1639G>A, c.173+1000C>T)

81360	ZRSR2 (zinc finger CCCH-type, RNA binding motif and serine/arginine-rich 2) (e.g., myelodysplastic syndrome, acute myeloid leukemia) gene analysis, common variant(s) (e.g., E65fs, E122fs, R448fs)
81400	Molecular pathology procedure, level 1 (e.g., identification of single germline variant [e.g., SNP] by techniques such as restriction enzyme digestion or melt curve analysis)
81401	Molecular pathology procedure, Level 2 (e.g., 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat)
81402	Molecular pathology procedure, Level 3 (e.g., >10 SNPs, 2-10 methylated variants, or 2-10 somatic variants [typically using non-sequencing target variant analysis], immunoglobulin and T-cell receptor gene rearrangements, duplication/deletion variants 1 exon, loss of heterozygosity [LOH], uniparental disomy [UPD])
81403	Molecular pathology procedure, Level 4 (e.g., analysis of single exon by DNA sequence analysis, analysis of >10 amplicons using multiplex PCR in 2 or more independent reactions, mutation scanning or duplication/deletion variants of 2-5 exons)
81404	Molecular pathology procedure, Level 5 (e.g., analysis of 2-5 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 6-10 exons, or characterization of a dynamic mutation disorder/triplet repeat by Southern blot analysis)
81405	Molecular pathology procedure, Level 6 (e.g., analysis of 6-10 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 11-25 exons, regionally targeted cytogenomic array analysis)
81406	Molecular pathology procedure, Level 7 (e.g., analysis of 11-25 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of 26-50 exons, cytogenomic array analysis for neoplasia)
81407	Molecular pathology procedure, Level 8 (e.g., analysis of 26-50 exons by DNA sequence analysis, mutation scanning or duplication/deletion variants of >50 exons, sequence analysis of multiple genes on one platform)
81408	Molecular pathology procedure, Level 9 (e.g., analysis of >50 exons in a single gene by DNA sequence analysis)
81479	Unlisted molecular pathology procedure
81413	Cardiac ion channelopathies (e.g., Brugada syndrome, long QT syndrome, short QT syndrome, catecholaminergic polymorphic ventricular tachycardia); genomic sequence analysis panel, must include sequencing of at least 10 genes including ANK2, CASQ2, CAV3, KCNE1, KCNE2, KCNH2, KCNJ2, KCNQ1, RYR2, and SCN5A
81414	duplication/deletion gene analysis panel, must include analysis of at least 2 genes, including KCNH2 and KCNQ1
81415	Exome (e.g., unexplained constitutional or heritable disorder or syndrome); sequence analysis
81417	re-evaluation of previously obtained exome sequence (e.g., updated knowledge or unrelated condition/ syndrome)
81420	Fetal chromosomal aneuploidy (e.g., trisomy21, monosomy X) genomic sequence analysis panel, circulating cell-free fetal DNA in maternal blood, must include analysis of chromosomes 13,18, and 21

81445	Solid organ neoplasm, genomic sequence analysis panel, 5-50 genes, interrogation for sequence variants and copy number variants or rearrangements, if performed; DNA analysis or combined DNA and RNA analysis
81449	RNA analysis
81450	Hematolymphoid neoplasm or disorder, genomic sequence analysis panel, 5-50 genes, interrogation for sequence variants, and copy number variants or rearrangements, or isoform expression or mRNA expression levels, if performed; DNA analysis or combined DNA and RNA analysis
81455	Solid organ or hematolymphoid neoplasm or disorder, 51 or greater genes, genomic sequence analysis panel, interrogation for sequence variants and copy number variants or rearrangements, or isoform expression or mRNA expression levels, if performed; DNA analysis or combined DNA and RNA analysis
81456	RNA analysis
81457	Solid organ neoplasm, genomic sequence analysis panel, interrogation for sequence variants; DNA analysis, microsatellite instability
81458	DNA analysis, copy number variants and microsatellite instability
81459	DNA analysis or combined DNA and RNA analysis, copy number variants, microsatellite instability, tumor mutation burden, and rearrangements
81462	Solid organ neoplasm, genomic sequence analysis panel, cell-free nucleic acid (e.g., plasma), interrogation for sequence variants; DNA analysis or combined DNA and RNA analysis; copy number variants and rearrangements
81463	DNA analysis, copy number variants, and microsatellite instability
81464	DNA analysis or combined DNA and RNA analysis, copy number variants, microsatellite instability, tumor mutation burden, and rearrangements

MULTIANALYTE ASSAYS WITH ALGORITHMIC ANALYSES

CODE	DESCRIPTION
81507	Fetal aneuploidy (trisomy 21, 18 and 13) DNA sequence analysis of selected regions using maternal plasma, algorithm reported as a risk score for each trisomy
81508	Fetal congenital abnormalities, biochemical assays of two proteins (PAPP-A, hCG [any form]), utilizing maternal serum, algorithm reported as a risk score
81509	Fetal congenital abnormalities, biochemical assays of three proteins (PAPP-A, hCG [any form], DIA), utilizing maternal serum, algorithm reported as a risk score
81510	Fetal congenital abnormalities, biochemical assays of three analytes (AFP, uE3, hCG [any form]), utilizing maternal serum, algorithm reported as a risk score
81511	Fetal congenital abnormalities, biochemical assays of four analytes (AFP, uE3, hCG [any form], DIA) utilizing maternal serum, algorithm reported as a risk score (may include additional results from previous biochemical testing)
81512	Fetal congenital abnormalities, biochemical assays of five analytes (AFP, uE3, total hCG, hyperglycosylated hCG, DIA) utilizing maternal serum, algorithm reported as a risk score

81517	Liver disease, analysis of 3 biomarkers (hyaluronic acid [HA], procollagen III amino terminal peptide [PIIINP], tissue inhibitor of metalloproteinase 1 [TIMP-1]), using immunoassays, utilizing serum, prognostic algorithm reported as a risk score and risk of liver fibrosis and liver-related clinical events within 5 years
81518	Oncology (breast), mRNA, gene expression profiling by real-time RT-PCR of 11 genes (7 content and 4 housekeeping), utilizing formalin-fixed paraffin embedded tissue, algorithms reported as percentage risk for metastatic recurrence and likelihood of benefit from extended endocrine therapy
81519	Oncology (breast), mRNA, gene expression profiling by real-time RT-PCR of 21 genes, utilizing formalin-fixed paraffin embedded tissue, algorithm reported as recurrence score Request for testing is appropriate for the following population: female or male patient with recently diagnosed breast tumors
81520	Oncology (breast), mRNA, gene expression profiling by hybrid capture of 58 genes (50 content and 8 housekeeping), utilizing formalin-fixed paraffin-embedded tissue, algorithm reported as recurrence risk score
81521	Oncology (breast), mRNA, microarray gene expression profiling of 70 content genes and 465 housekeeping genes, utilizing fresh frozen or formalin-fixed paraffin-embedded tissue, algorithm reported as index related to risk of distant metastasis
81522	Oncology (breast), mRNA, gene expression profiling by RT-PCR of 12 genes (8 content and 4 housekeeping), utilizing formalin-fixed paraffin-embedded tissue, algorithm reported as recurrence risk score (see criteria under 81519)
81523	Next-generation sequencing of breast cancer profiling 70 content genes and 31 housekeeping genes
81528	Oncology (colorectal screening, quantitative real-time target, and signal amplification of 10 DNA markers (KRAS mutations, promoter methylation of NDRG4 and BMP3) and fecal hemoglobin, utilizing stool, algorithm reported as a positive or negative result
81538	Oncology (lung), mass spectrometric 8-protein signature, including amyloid A, utilizing serum, prognostic and predictive algorithm reported as good versus poor overall survival
81503	Oncology (ovarian), biochemical assays of five proteins (CA-125, apolipoprotein A1, beta-2 microglobulin, transferrin, and pre-albumin), utilizing serum, algorithm reported as a risk score
81595	Cardiology (heart transplant), mRNA, gene expression profiling by real-time quantitative PCR of 20 genes (11 content and 9 housekeeping), utilizing subfraction of peripheral blood, algorithm reported as a rejection risk score
81596	Infectious disease, chronic hepatitis C virus (HCV) infection, six biochemical assays (ALT, A2-macroglobulin, apolipoprotein A-1, total bilirubin, GGT and haptoglobin) utilizing serum, prognostic algorithm reported as scores for fibrosis and necroinflammatory activity in liver
81599	Unlisted multianalyte assay with algorithmic analysis

CHEMISTRY

CODE	DESCRIPTION
82009	Ketone body(s) (e.g., acetone, acetoacetic acid, beta-hydroxybutyrate); qualitative
82013	Acetylcholinesterase
82016	Acylcarnitines; qualitative, each specimen
82017	quantitative, each specimen
82024	Adrenocorticotropic hormone (ACTH)
82040	Albumin; serum, plasma, or whole blood (see Rule 11)
82043	urine (e.g., microalbumin), quantitative (see Rule 11)
82044	urine (e.g., microalbumin), semiquantitative (e.g., reagent strip assay) (see Rule 11)
82045	ischemia modified
82042	other source, quantitative, each specimen (see Rule 11)
82088	Aldosterone
82103	Alpha-1-antitrypsin; total
82104	phenotype
82105	Alpha-fetoprotein (AFP); serum
82106	amniotic fluid
82107	AFP-L3 fraction isoform and total AFP (including ratio)
82108	Aluminum
82120	Amines, vaginal fluid, qualitative
82127	Amino acids; single, qualitative, each specimen (not elsewhere specified)
82128	multiple, qualitative, each specimen (not elsewhere specified)
82131	single, quantitative, each specimen, (not elsewhere specified)
82136	Amino acids, 2 to 5 amino acids, quantitative, each specimen
82139	Amino acids, 6 or more amino acids, quantitative, each specimen
82140	Ammonia (blood)
82143	Amniotic fluid scan (spectrophotometric)
82150	Amylase (see Rule 11)
82154	Androstanediol glucuronide
82157	Androstenedione
82166	Anti-mullerian hormone (AMH)
82172	Apolipoprotein, each (see Rule 16)
82175	Arsenic
82180	Ascorbic acid (Vitamin C), blood
82232	Beta-2 microglobulin
82239	Bile acids; total
82240	cholylglycine
82247	Bilirubin; total (see Rule 11)

82248	direct (see Rule 11)
82261	Biotinidase, each specimen
82270	Blood, occult, by peroxidase activity (e.g., guaiac), qualitative; feces, consecutive collected specimens with single determination, for colorectal neoplasm screening (i.e., patient was provided 3 cards or single triple card for consecutive collection)
82274	Blood, occult, by fecal hemoglobin determination by immunoassay, qualitative, feces, 1-3 simultaneous determinations
82300	Cadmium
82306	Vitamin D; 25 hydroxy, includes fraction(s), if performed
82308	Calcitonin
82310	Calcium; total (see Rule 11)
82330	ionized (see Rule 11)
82340	urine quantitative, timed specimen (see Rule 11)
82355	Calculus; qualitative analysis
82360	quantitative analysis, chemical
82365	infrared spectroscopy
82370	x-ray diffraction
82373	Carbohydrate deficient transferrin
82374	Carbon dioxide (bicarbonate) (see Rule 11)
82375	Carboxyhemoglobin; quantitative
82378	Carcinoembryonic antigen (CEA) (see Rule 15)
82379	Carnitine (total and free), quantitative, each specimen
82382	Catecholamines; total urine
82383	blood
82384	fractionated
82390	Ceruloplasmin
82435	Chloride; blood (see Rule 11)
82436	urine (see Rule 11)
82438	other source (see Rule 11)
82465	Cholesterol, serum or whole blood, total (see Rule 11)
82480	Cholinesterase; serum
82495	Chromium
82507	Citrate
82523	Collagen cross links, any method
82525	Copper
82530	Cortisol; free
82533	total
82550	Creatine kinase (CK), (CPK); total (see Rule 11)
82552	isoenzymes
82553	MB fraction only
82565	Creatinine; blood (see Rule 11)
82570	other source (see Rule 11)
82575	clearance (see Rule 11)

82595	Cryoglobulin, qualitative or semi-quantitative (e.g., cryocrit)
82607	Cyanocobalamin (Vitamin B 12); (see Rule 6B)
82608	unsaturated binding capacity
82615	Cystine and homocystine, urine, qualitative
82626	Dehydroepiandrosterone (DHEA)
82627	Dehydroepiandrosterone-sulfate (DHEA-S)
82634	Deoxycortisol, 11
82653	Measurement of pancreatic elastase (enzyme) in stool
82656	Elastase, pancreatic (EL-1), fecal; qualitative or semi-quantitative
82668	Erythropoietin
82670	Estradiol; total
82681	free
82672	Estrogens; total
82677	Estriol
82679	Estrone
82705	Fat or lipids, feces; qualitative
82710	quantitative
82726	Very long chain fatty acids
82728	Ferritin
82731	Fetal fibronectin, cervicovaginal secretions, semi-quantitative
82746	Folic acid; serum (see Rule 6B)
82747	RBC (see Rule 6B)
82759	Galactokinase, RBC
82760	Galactose
82775	Galactose-1-phosphate uridyl transferase; quantitative
82784	Gammaglobulin (immunoglobulin); IgA, IgD, IgG, IgM, each
82785	IgE
82787	immunoglobulin subclasses (e.g., IgG1, 2, 3 or 4), each
82803	Gases, blood, any combination of (two or more) pH, pCO_2, $p0_2$, $C0_2$, HC03 (including calculated 0_2 saturation);
82805	with 0_2 saturation, by direct measurement, except pulse oximetry
82810	Gases, blood, O_2 saturation only, by direct measurement, except pulse oximetry
82820	Hemoglobin-oxygen affinity (pO_2 for 50% hemoglobin saturation with oxygen)
82938	Gastrin after secretin stimulation
82941	Gastrin
82943	Glucagon
82945	Glucose, body fluid, other than blood (see Rule 11)
82947	Glucose; quantitative, blood (except reagent strip) (see Rule 11)
82948	blood, reagent strip
82950	post glucose dose (includes glucose)
82951	tolerance test (GTT), 3 specimens (includes glucose)
82952	tolerance test, each additional beyond 3 specimens (List separately in addition to code for primary procedure)

(Use 82952 in conjunction with 82951)

82955 Glucose-6-phosphate dehydrogenase (G6PD); quantitative

82960 screen

82963 Glucosidase, beta

82965 Glutamate dehydrogenase

82977 Glutamyltransferase, gamma (GGT) (see Rule 11)

82985 Glycated protein

83001 Gonadotropin; follicle stimulating hormone (FSH)

83002 luteinizing hormone (LH)

83003 Growth hormone, human (HGH) (somatotropin)

83009 Helicobacter pylori, blood test analysis for urease activity, non-radioactive isotope (e.g., C-13) (includes kit)

83010 Haptoglobin; quantitative

83013 Helicobacter pylori; breath test analysis for urease activity, non-radioactive isotope (includes kit)

83015 Heavy metal (e.g., arsenic, barium, beryllium, bismuth, antimony, mercury); qualitative, any number of analytes

83020 Hemoglobin fractionation and quantitation; electrophoresis (e.g., A2, S, C, and/or F)

83021 chromatography (e.g., A2, S, C, and/or F)

83030 Hemoglobin; by copper sulfate method, non- automated; F (fetal), chemical

83036 glycosylated (A1C)

83050 methemoglobin, quantitative

83051 plasma

83080 b-Hexosaminidase, each assay (Tay Sachs diagnostic/carrier testing)

83090 Homocysteine

83150 Homovanillic acid (HVA)

83497 Hydroxyindolacetic acid, 5-(HIAA)

83498 Hydroxyprogesterone, 17-d

83500 Hydroxyproline; free

83505 total

83521 Measurement of immunoglobulin light chains

83525 Insulin; total

83527 free

83529 Measurement of interleukin-6

83540 Iron (see Rule 11)

83550 Iron binding capacity (see Rule 11)

83586 Ketosteroids, 17 (17-KS); total

83593 fractionation

83605 Lactate (lactic acid)

83615 Lactate dehydrogenase (LD), (LDH); (see Rule 11)

83625 isoenzymes, separation and quantitation

83630 Lactoferrin, fecal; qualitative

83631 quantitative

83655	Lead
83661	Fetal lung maturity assessment; lecithin sphingomyelin (L/S) ratio
83662	foam stability test
83663	fluorescence polarization
83664	lamellar body density
83690	Lipase
83718	Lipoprotein, direct measurement; high density cholesterol (HDL cholesterol) (see Rule 11)
83727	Luteinizing releasing factor (LRH)
83735	Magnesium (see Rule 11)
83785	Manganese
83825	Mercury, quantitative
83835	Metanephrines
83864	Mucopolysaccharides, acid, quantitative
83876	Myeloperoxidase (MPO)
83880	Natriuretic peptide
83918	Organic acids; total, quantitative, each specimen
83919	qualitative, each specimen
83921	Organic acid, single, quantitative
83930	Osmolality; blood (see Rule 4)
83935	urine (see Rule 4)
83945	Oxalate
83950	Oncoprotein; HER-2/neu (see Rule 15)
83951	des-gamma-carboxy-prothrombin (DCP)
83970	Parathormone (parathyroid hormone)
83993	Calprotectin, fecal
84030	Phenylalanine (PKU), blood
84060	Phosphatase, acid; total (see Rule 11)
84066	prostatic (see Rule 15)
84075	Phosphatase, alkaline; (see Rule 11)
84078	heat stable (total not included) (see Rule 11)
84080	isoenzymes
84081	Phosphatidylglycerol (separate procedure)
84087	Phosphohexose isomerase
84100	Phosphorus inorganic (phosphate); (see Rule 11)
84105	urine (see Rule 11)
84106	Porphobilinogen, urine; qualitative
84110	quantitative
84112	Evaluation of cervicovaginal fluid for specific amniotic fluid protein(s) (e.g., placental alpha macroglobulin-1 [PAMG-1], placental protein 12[PP12}, alpha-fetoprotein), qualitative, each specimen (Only PAMG-1 is a covered service)
84119	Porphyrins, urine; qualitative
84120	quantitation and fractionation

84132	Potassium; serum, plasma or whole blood (see Rule 11)
84133	urine (see Rule 11)
84134	Prealbumin
84140	Pregnenolone
84143	17-hydroxypregnenolone
84144	Progesterone
84146	Prolactin
84152	Prostate specific antigen (PSA); complexed (direct measurement)
84153	total (see Rule 15)
84154	free (see Rule 15)
84155	Protein, total, except by refractometry; serum, plasma or whole blood (see Rule 11)
84156	urine (see Rule 11)
84157	other source (e.g., synovial fluid, cerebrospinal fluid) (see Rule 11)
84160	Protein, total, by refractometry, any source (see Rule 11)
84163	Pregnancy-associated plasma protein-A (PAPP-A)
84165	Protein; electrophoretic fractionation and quantitation, serum
84166	electrophoretic fractionation and quantitation, other fluids with concentration (e.g., urine, CSF)
84202	Protoporphyrin, RBC; quantitative
84207	Pyridoxal phosphate (Vitamin B-6)
84220	Pyruvate kinase
84233	Receptor assay; estrogen
84234	progesterone
84275	Sialic acid
84295	Sodium; serum, plasma or whole blood (see Rule 11)
84300	urine (see Rule 11)
84302	other source
84305	Somatomedin
84375	Sugars, chromatographic, TLC or paper chromatography
84376	Sugars (mono-,di-, and oligosaccharides); single qualitative, each specimen
84377	multiple qualitative, each specimen
84378	single quantitative, each specimen
84379	multiple quantitative, each specimen
84402	Testosterone; free
84403	total
84410	bioavailable, direct measurement (e.g., differential precipitation)
84425	Thiamine (Vitamin B-1)
84433	Evaluation of thiopurine s-methyltransferase (tpmt)
84436	Thyroxine; total
84439	free
84442	Thyroxine binding globulin (TBG)
84443	Thyroid stimulating hormone (TSH)
84446	Tocopherol alpha (Vitamin E)

84449 Transcortin (cortisol binding globulin)
84450 Transferase; aspartate amino (AST) (SGOT) (see Rule 11)
84460 alanine amino (ALT) (SGPT) (see Rule 11)
84466 Transferrin
84478 Triglycerides (see Rule 11)
84479 Thyroid hormone (T3 or T4) uptake (with or without) thyroid hormone binding ratio (THBR)
84480 Triiodothyronine T3; total (TT-3)
84481 free
84482 reverse
84484 Troponin, quantitative
84510 Tyrosine
84512 Troponin, qualitative
84520 Urea nitrogen; quantitative (see Rule 11)
84540 Urea nitrogen, urine (see Rule 11)
84550 Uric acid; blood (see Rule 11)
84560 other source (see Rule 11)
84585 Vanillylmandelic acid (VMA), urine
84588 Vasopressin (antidiuretic hormone, ADH)
84590 Vitamin A
84591 Vitamin, not otherwise specified
84597 Vitamin K
84620 Xylose absorption test, blood and/or urine
84630 Zinc
84681 C-peptide
84702 Gonadotropin, chorionic (hCG); quantitative (see Rules 9 and 15)
84703 qualitative (see Rule 9)
84704 free beta chain
84999 Unlisted chemistry/genetic testing procedure (see Rule 3)
(Reimbursement is limited to the listed analytes for the purpose of providing information for diagnosis or monitoring of genetic disease or carrier state. Clinical applications other than genetic testing are subject to a coverability determination for unlisted procedures.)

Acetylglucosamidase, Alpha N-
Acid Maltase
Acyl-CoA Dehydrogenase, Medium Chain
Short Chain
Adenosine deaminase
Adenylate kinase
Aldolase
Arginosuccinase
Arylsulfatase A, B and/or C
ATPase
Citrate Synthase
Cytochrome Oxidase
Dihydropteridine Reductase
Dystrophin
Enolase
Fumarase
Galactocerebrosidase, Beta
Galactose –4- Sulfatase
Galactose –6- Sulfatase
Galactosidase, Alpha and/or Beta
Glucocerebrosidase, Beta
Glucuronidase, Beta
Glyceraldehyde –3-P- Dehydrogenase
Glycerophosphate Dehydrogenase, Alpha
Hexosaminidase, A
Iduronidase, alpha
Iduronosulfatase
Mannosidase, Alpha and/or Beta
Myoadenylate Deaminase
Neuraminidase
Nucleoside Phosphorylase
Ornithine Carbamyl Transferase (OCT)
Phosphofructokinase
Phosphoglucomutase, Isoenzymes
Phosphoglycerate Kinase
Phosphoglycerate Mutase
Phosphorylase
Phosphorylase B Kinase
Phytanic acid
Pyruvate Decarboxylase
Sphingomyelinase
Succinate Cytochrome C Reductase
Succinate Dehydrogenase

Fatty Acids, Long Chain
Fucosidase, Alpha and/or Beta
NADH Cytochrome C Reductase
NADH Dehydrogenase
Sulfaminidase
Triose phosphate Isomerase

HEMATOLOGY and COAGULATION

CODE	DESCRIPTION
85002	Bleeding time
85004	Blood count; automated differential WBC count
85007	blood smear, microscopic examination with manual differential WBC count (includes RBC morphology and platelet estimation)
85013	spun microhematocrit
85014	hematocrit (Hct)
85018	hemoglobin (Hgb)
85025	complete (CBC), automated (Hgb, Hct, RBC, WBC and platelet count), and automated differential WBC count
85027	complete (CBC), automated (Hgb, Hct, RBC, WBC and platelet count)
85032	manual cell count (erythrocyte, leukocyte, or platelet) each
85041	red blood cell (RBC), automated
85044	reticulocyte, manual
85045	reticulocyte, automated
85046	reticulocytes, automated, including 1 or more cellular parameters (e.g., reticulocyte hemoglobin content [CHr], immature reticulocyte fraction [IRF], reticulocyte volume [MRV], RNA content), direct measurement
85048	leukocyte (WBC), automated
85049	platelet, automated
85055	Reticulated platelet assay
85060	Blood smear, peripheral, (including) interpretation by physician with written report
85097	Bone marrow; smear interpretation
85210	Clotting; factor II, prothrombin, specific
85220	factor V (AcG or proaccelerin), labile factor
85230	factor VII (proconvertin, stable factor)
85240	factor VIII (AHG), 1-stage
85244	factor VIII related antigen
85245	factor VIII, VW factor, ristocetin cofactor
85246	factor VIII, VW factor antigen
85247	factor VIII, von Willebrand factor, multimetric analysis
85250	factor IX (PTC or Christmas)
85260	factor X (Stuart-Prower)
85270	factor XI (PTA)
85280	factor XII (Hageman)
85290	factor XIII (fibrin stabilizing)
85291	factor XIII (fibrin stabilizing), screen solubility
85292	prekallikrein assay (Fletcher factor assay)

85293	high molecular weight kininogen assay (Fitzgerald factor assay)
85300	Clotting inhibitors or anticoagulants; antithrombin III, activity
85301	antithrombin III, antigen assay
85302	protein C, antigen
85303	protein C, activity
85305	protein S, total
85306	protein S, free
85307	Activated Protein C (APC) resistance assay
85335	Factor inhibitor test
85337	Thrombomodulin
85347	Coagulation time; activated
85348	other methods
85360	Euglobulin lysis
85362	Fibrin(ogen) degradation (split) products (FDP) (FSP); agglutination slide, semiquantitative
85366	paracoagulation
85370	quantitative
85378	Fibrin degradation products, D-dimer; qualitative or semiquantitative
85379	quantitative
85380	ultrasensitive (e.g., for evaluation for venous thromboembolism), qualitative or semiquantitative
85384	Fibrinogen; activity
85385	antigen
85397	Coagulation and fibrinolysis, functional activity, not otherwise specified (e.g., ADAMTS-13), each analyte
85441	Heinz bodies; direct
85445	induced, acetyl phenylhydrazine
85460	Hemoglobin or RBCs, fetal, for fetomaternal hemorrhage; differential lysis (Kleihauer-Betke)
85461	rosette
85475	Hemolysin, acid
85520	Heparin assay
85536	Iron stain, peripheral blood
85540	Leukocyte alkaline phosphatase with count
85549	Muramidase
85555	Osmotic fragility, RBC; unincubated
85557	incubated
85576	Platelet; aggregation (in vitro), each agent
85610	Prothrombin time;
85612	Russell viper venom time (includes venom); undiluted
85613	diluted
85635	Reptilase test
85651	Sedimentation rate, erythrocyte; non-automated

85652	automated
85670	Thrombin time; plasma
85705	Thromboplastin inhibition; tissue
85730	Thromboplastin time, partial (PTT); plasma or whole blood
85732	substitution, plasma fractions, each
85810	Viscosity

IMMUNOLOGY

Immunologic tests for antigen or antibody should be reported using the most specific code available. **For infectious agent antibody or antigen tests, see codes 86602 – 86793 and the cross-references located in that coding range.** See Rules 6 and 10. For antigen identification in solid tissue, see 88342-88346 in Surgical Pathology.

CODE	DESCRIPTION
86003	Allergen specific IgE; quantitative or semiquantitative, crude allergen extract, each
86008	quantitative or semiquantitative, recombinant or purified component, each
86015	Measurement of actin (smooth muscle) antibody
86036	Antineutrophil cytoplasmic antibody (ANCA); screen; each antibody
86037	titer, each antibody
86038	Antinuclear antibodies (ANA);
86039	titer
86041	Acetylcholine receptor (AChR); binding antibody
86042	blocking antibody
86043	modulating antibody
86051	Elisa detection of aquaporin-4 (neuromyelitis optica ýnmo¨) antibody
86052	Cell-based immunofluorescence (cba) detection of aquaporin-4 (neuromyelitis optica ýnmo¨) antibody
86053	Flow cytometry detection of aquaporin-4 (neuromyelitis optica ýnmo¨) antibody
86060	Antistreptolysin 0; titer
86063	screen
86140	C-reactive protein;
86141	high sensitivity (hsCRP)
86146	Beta 2 Glycoprotein 1 antibody, each
86147	Cardiolipin (phospholipid) antibody, each Ig class
86148	Anti-phosphatidylserine (phospholipid) antibody
86157	Cold agglutinin; titer
86160	Complement; antigen, each component
86161	functional activity, each component
86162	total hemolytic (CH50)
86215	Deoxyribonuclease, antibody
86225	Deoxyribonucleic acid (DNA) antibody; native or double stranded
86231	Detection of endomysial antibody (ema)

86235	Extractable nuclear antigen, antibody to, any method (e.g., nRNP, SS-A, SS-B, Sm, RNP, Sc170, J01), each antibody
86255	Fluorescent noninfectious agent antibody; screen, each antibody, (not elsewhere specified) (see Rule 10)
86256	titer, each antibody (not elsewhere specified) (see Rule 10)
86258	Detection of gliadin (deamidated) (dgp) antibody
86294	Immunoassay for tumor antigen, qualitative or semiquantitative (e.g., bladder tumor antigen) (see Rule 15)
86300	Immunoassay for tumor antigen, quantitative; CA 15-3 (27.29) (see Rule 15)
86301	CA 19-9 (see Rule 15)
86304	CA 125 (see Rule 15)
86305	Human epididymis protein 4 (HE4)
86308	Heterophile antibodies; screening
86309	titer
86316	Immunoassay for tumor antigen, other antigen, quantitative, (e.g., CA 50, 72-4, 549), each (not elsewhere specified) (see Rule 15)
86318	Immunoassay for infectious agent antibody, qualitative or semiquantitative, single step method (not elsewhere specified) (e.g., reagent strip)
86320	Immunoelectrophoresis; serum
86325	other fluids (e.g., urine, cerebrospinal fluid) with concentration
86329	Immunodiffusion; not elsewhere specified
86334	Immunofixation electrophoresis; serum
86335	other fluids with concentration (e.g., urine, CSF)
86336	Inhibin A
86337	Insulin antibodies
86340	Intrinsic factor antibodies
86341	Islet cell antibody (see Rule 19)
86355	B cells, total count (see Rule 18)
86357	Natural killer (NK) cells, total count (see Rule 18)
86359	T cells; total count
86360	absolute CD4 and CD8 count, including ratio
86361	absolute CD4 count (For T-cell immunophenotyping, see Rule 18)
86363	Flow cytometry detection of myelin oligodendrocyte glycoprotein (mog-igg1) antibody
86364	Measurement of tissue transglutaminase
86366	Muscle-specific kinase (MuSK) antibody
86367	Stem cells (i.e., CD34), total count (see Rule 18)
86376	Microsomal antibodies (e.g., thyroid or liver-kidney), each
86381	Measurement of mitochondrial antibody
86382	Neutralization test, viral
86403	Particle agglutination; screen, each antibody
86430	Rheumatoid factor; qualitative
86431	quantitative

86480	Tuberculosis test, cell mediated immunity antigen response measurement; gamma interferon
86481	enumeration of gamma interferon-producing T-cells in cell suspension
86592	Syphilis test, non-treponemal antibody; qualitative (e.g., VDRL, RPR, ART)
86593	quantitative (includes screen and titer)
	(For infectious agent antibody or antigen tests not listed by name, see Rule 10 A, B; for maximum reimbursable amounts for two or more infectious agent tests, see Rule 6C.)
86596	Measurement of voltage-gated calcium channel antibody
86602	Antibody; actinomyces
86603	adenovirus
86606	Aspergillus
86609	bacterium, not elsewhere specified
86611	Bartonella
86612	Blastomyces
86615	Bordetella
86617	Borrelia burgdorferi (Lyme disease) confirmatory test (e.g., Western Blot or immunoblot)
86618	Borrelia burgdorferi (Lyme disease)
86619	Borrelia (relapsing fever)
86622	Brucella
86625	Campylobacter
86631	Chlamydia
86632	Chlamydia, IgM
86635	Coccidioides
86638	Coxiella brunetii (Q fever)
86641	Cryptococcus
86644	cytomegalovirus (CMV)
86645	cytomegalovirus (CMV), IgM
86651	encephalitis, California (La Crosse)
86652	encephalitis, Eastern equine
86653	encephalitis, St. Louis
86654	encephalitis, Western equine
86658	enterovirus (e.g., coxsackie, echo, polio)
86663	Epstein-Barr (EB) virus, early antigen (EA)
86664	Epstein-Barr (EB) virus, nuclear antigen (EBNA)
86665	Epstein-Barr (EB) virus, viral capsid (VCA)
86666	Ehrlichia
86668	Francisella tularensis
86671	fungus, not elsewhere specified
86674	Giardia lamblia
86677	Helicobacter pylori
86682	helminth, not elsewhere specified
86684	Hemophilus influenza

86687 HTLV-I
86689 HTLV or HIV antibody, confirmatory test (e.g., Western Blot)
86692 hepatitis, delta agent
86696 herpes simplex, type 2
86698 histoplasma
86701 HIV-1
86702 HIV-2
86703 HIV-1 and HIV-2, single result
(For maximum reimbursable amounts for hepatitis tests performed in combination, see Rule 6C)
86704 Hepatitis B core antibody (HBcAb), total
86705 IgM antibody
86706 Hepatitis B surface antibody (HBsAb)
86707 Hepatitis Be antibody (HBeAb)
86708 Hepatitis A antibody (HAAb)
86709 Hepatitis A antibody (HAAb), IgM antibody
86710 Antibody; influenza virus
86713 Legionella
86717 Leishmania
86720 Leptospira
86723 Listeria monocytogenes
86727 lymphocytic choriomeningitis
86735 mumps
86738 mycoplasma
86741 Neisseria meningitidis
86744 Nocardia
86747 parvovirus
86750 Plasmodium (malaria)
86753 protozoa, not elsewhere specified
86756 respiratory syncytial virus
86757 Rickettsia
86759 rotavirus
86762 rubella
86765 rubeola
86768 Salmonella
86771 Shigella
86777 Toxoplasma
86778 Toxoplasma, IgM
86780 Treponema pallidum
86784 Trichinella
86787 varicella-zoster
86788 West Nile virus, IgM
86789 West Nile virus

86790	virus, not elsewhere specified
86793	Yersinia
86794	Zika virus,amplified probe technique
86800	Thyroglobulin antibody
86803	Hepatitis C antibody;
86804	confirmatory test (e.g., immunoblot)
86849	Unlisted immunology procedure
87662	Detection test by nucleic acid for zika virus, amplified probe technique

TRANSFUSION MEDICINE

CODE	DESCRIPTION
86850	Antibody screen, RBC, each serum technique
86860	Antibody elution (RBC), each elution
86870	Antibody identification, RBC antibodies, each panel for each serum technique
86880	Antihuman globulin test (Coombs test); direct, each antiserum
86900	Blood typing; serologic; ABO
86901	Rh (D)
86905	RBC antigens, other than ABO or Rh (D), each
86940	Hemolysins and agglutinins; auto, screen, each
86941	incubated

MICROBIOLOGY

CODE	DESCRIPTION
87015	Concentration (any type), for infectious agents
87040	Culture, bacterial; blood, aerobic, with isolation and presumptive identification of isolates (includes anaerobic culture, if appropriate)
87045	stool, aerobic, with isolation and preliminary examination (e.g., KIA, LIA), Salmonella and Shigella species
87046	stool, aerobic, additional pathogens, isolation and presumptive identification of isolates, each plate
87070	any other source except urine, blood or stool, aerobic, with isolation and presumptive identification of isolates
87075	any source, except blood, anaerobic with isolation and presumptive identification of isolates
87076	anaerobic isolate, additional methods required for definitive identification, each isolate
87077	aerobic isolate, additional methods required for definitive identification, each isolate
87081	Culture, presumptive, pathogenic organisms, screening only;
87086	Culture, bacterial; quantitative colony count, urine
87088	with isolation and presumptive identification of each isolate, urine

87101	Culture, fungi (mold or yeast) isolation, with presumptive identification of isolates; skin, hair, or nail
87102	other source (except blood)
87103	blood
87106	Culture, fungi, definitive identification, each organism; yeast (Use in addition to codes 87101, 87102, or 87103 when appropriate)
87107	mold
87109	Culture, mycoplasma, any source
87110	Culture, chlamydia, any source
87116	Culture, tubercle, or other acid-fast bacilli (e.g., TB, AFB, mycobacteria) any source, with isolation and presumptive identification of isolates
87118	Culture, mycobacterial, definitive identification, each isolate
87164	Dark field examination, any source (e.g., penile, vaginal, oral, skin); includes specimen collection
87166	without collection
87169	Macroscopic examination; parasite
87172	Pinworm exam (e.g., cellophane tape prep)
87177	Ova and parasites, direct smears, concentration and identification
87181	Susceptibility studies, antimicrobial agent; agar dilution method, per agent (e.g., antibiotic gradient strip)
87184	disk method, per plate (12 or fewer agents)
87185	enzyme detection (e.g., beta lactamase), per enzyme
87186	microdilution or agar dilution (minimum inhibitory concentration (MIC) or breakpoint), each multi-antimicrobial, per plate
87188	macrobroth dilution method, each agent
87190	mycobacteria, proportion method, each agent
87205	Smear, primary source with interpretation; Gram or Giemsa stain for bacteria, fungi or cell types
87206	fluorescent and/or acid fast stain for bacteria, fungi, parasites, viruses or cell types
87207	special stain for inclusion bodies or parasites (e.g., malaria, coccidia, microsporidia, trypanosomes, herpes viruses)
87209	complex special stain (e.g., trichrome, iron hemotoxylin) for ova and parasites
87210	wet mount for infectious agents (e.g., saline, India ink, KOH preps) (Does not include KOH on skin, hair or nails)
87230	Toxin or antitoxin assay, tissue culture (e.g., Clostridium difficile toxin)
87250	Virus isolation; inoculation of embryonated eggs, or small animal, includes observation and dissection
87252	tissue culture inoculation, observation, and presumptive identification by cytopathic effect
87253	tissue culture, additional studies or definitive identification (e.g., hemabsorption, neutralization, immunofluorescence stain), each isolate

87254 centrifuge enhanced (shell vial) technique, includes identification with immunofluorescence stain, each virus

87255 including identification by non-immunologic method, other than by cytopathic effect (e.g., virus specific enzymatic activity)

87260 Infectious agent antigen detection by immunofluorescent technique; adenovirus

87265 Bordetella pertussis/parapertussis

87269 giardia

87270 Chlamydia trachomatis

87271 Cytomegalovirus, direct fluorescent antibody (DFA)

87272 cryptosporidium

87273 Herpes simplex virus type 2

87274 Herpes simplex virus type 1

87275 influenza B virus

87276 influenza A virus

87278 Legionella pneumophila

87279 Parainfluenza virus, each type

87280 respiratory syncytial virus

87281 Pneumocystis carinii

87290 Varicella zoster virus

87299 not otherwise specified, each organism (see Rule 10B)

87301 Infectious agent antigen detection by immunoassay technique, (e.g., enzyme immunoassay [EIA], enzyme-linked immunosorbent assay [ELISA], fluorescence immunoassay [FIA], immunochemiluminometric assay [IMCA]) qualitative or semiquantitative; adenovirus enteric types 40/41

87305 Aspergillus

87320 Chlamydia trachomatis

87324 Clostridium difficile toxin(s)

87327 Cryptococcus neoformans

87328 cryptosporidium

87329 giardia

87332 cytomegalovirus

87335 Escherichia coli 0157

87336 Entamoeba histolytica dispar group

87337 Entamoeba histolytica group

87338 Helicobacter pylori, stool

87340 hepatitis B surface antigen (HBsAg)

87341 hepatitis B surface antigen (HBsAg) neutralization

87350 hepatitis Be antigen (HBeAg)

87380 hepatitis, delta agent

87385 Histoplasma capsulatum

87389 Infectious agent antigen detection by enzyme immunoassay technique, qualitative or semiquantitative, multiple-step method; hiv-1 antigen(s), with hiv-1 and hiv-2 antibodies, single result

87390	HIV-1 (e.g., P24 antigen)
87420	respiratory syncytial virus
87425	rotavirus
87427	Shiga-like toxin
87430	Streptococcus, group A
87449	Infectious agent antigen detection by immunoassay technique, (e.g., enzyme immunoassay [EIA], enzyme-linked immunosorbent assay [ELISA], immunochemiluminometric assay [IMCA], qualitative or semiquantitative; multiple-step method, not otherwise specified, each organism
87468	Detection of anaplasma phagocytophilum by amplified nucleic acid probe technique
87469	Detection of babesia microtim by amplified nucleic acid probe technique
87476	Infectious agent detection by nucleic acid (DNA or RNA); Borrelia burgdorferi, amplified probe technique
87478	Detection of babesia borrelia miyamotoi by amplified nucleic acid probe **technique**
87480	Candida species, direct probe technique
87481	Candida species, amplified probe technique
87484	Detection of ehrlichia chaffeensis by amplified nucleic acid probe technique
87486	Chlamydia pneumoniae, amplified probe technique
87490	Chlamydia trachomatis, direct probe technique
87491	Chlamydia trachomatis, amplified probe technique
87495	cytomegalovirus, direct probe technique
87496	cytomegalovirus, amplified probe technique
87497	cytomegalovirus, quantification
87498	enterovirus, amplified probe technique, includes reverse transcription, when performed
87500	vancomycin resistance (e.g., enterococcus species van A, van B), amplified probe technique
87501	influenza virus, includes reverse transcription, when performed, and amplified probe technique, each type or subtype
87502	influenza virus, for multiple types or sub-types, includes multiplex reverse transcription, when performed, and multiplex amplified probe technique, first 2 types or sub-types
87503	influenza virus, for multiple types or sub-types, includes multiplex reverse transcription, when performed, and multiplex amplified probe technique, each additional influenza virus type or sub-type beyond 2 (List separately in addition to code for primary procedure) (Use 87503 in conjunction with 87502)
87510	Gardnerella vaginalis, direct probe technique
87516	hepatitis B virus, amplified probe technique
87521	hepatitis C, amplified probe technique, includes reverse transcription when performed

87522	hepatitis C, quantification, includes reverse transcription when performed
87523	hepatitis D (delta), quantification, including reverse transcription, when performed
87529	Herpes simplex virus, amplified probe technique
87535	HIV-1, amplified probe technique, includes reverse transcription when performed
87536	HIV-1, quantification, includes reverse transcription when performed
87623	Human Papillomavirus (HPV), low-risk types (e.g., 6, 11, 42, 43, 44)
87624	Human Papillomavirus (HPV), high-risk type (e.g., 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 68)
87625	Human Papillomavirus (HPV), types 16 and 18 only, includes type 45, if performed
87551	Mycobacteria species, amplified probe technique
87556	Mycobacteria tuberculosis, amplified probe technique
87561	Mycobacteria avium-intracellulare, amplified probe technique
87563	Mycoplasma genitalium by DNA or RNA probe
87581	Mycoplasma pneumoniae, amplified probe technique
87590	Neisseria gonorrhoeae, direct probe technique
87591	Neisseria gonorrhoeae, amplified probe technique
87593	Orthopoxvirus (e.g., monkeypox virus, cowpox virus, and vaccinia virus), amplified probe technique, each
87631	Infectious agent detection by nucleic acid (dna or rna); respiratory virus (e.g., adenovirus, influenza virus, coronavirus, metapneumovirus, parainfluenza virus, respiratory syncytial virus, rhinovirus), includes multiplex reverse transcription, when performed, and multiplex amplified probe technique, multiple types or subtypes, 3-5 targets
87634	respiratory syncytial virus, amplified probe technique
87640	Staphylococcus aureus, amplified probe technique
87641	Staphylococcus aureus, methicillin resistant, amplified probe technique (includes staphylococcus aureus identification)
87650	Streptococcus, group A, direct probe technique
87653	Streptococcus, group B, amplified probe technique
87660	Trichomonas vaginalis, direct probe technique
87661	Trichomonas vaginalis, amplified probe technique
87797	Infectious agent detection by nucleic acid (DNA or RNA), not otherwise specified; direct probe technique, each organism
87798	amplified probe technique, each organism
87800	Infectious agent detection by nucleic acid (DNA or RNA), multiple organisms; direct probe(s) technique
87801	amplified probe(s) technique
87803	Infectious agent antigen detection by immunoassay with direct optical observation; Clostridium difficile toxin A
87806	HIV-1 antigen(s), with HIV-1 and HIV-2 antibodies
87804	Influenza
87807	respiratory syncytial virus

87808	Trichomonas vaginalis
87809	adenovirus
87880	Infectious agent detection by immunoassay with direct optical observation; Streptococcus, group A
87899	not otherwise specified
87900	Infectious agent drug susceptibility phenotype prediction using regularly updated genotypic bioinformatics
87901	Infectious agent genotype analysis by nucleic acid (DNA or RNA); HIV-1, reverse transcriptase and protease regions
87906	Infectious agent genotype analysis by nucleic acid (DNA or RNA); HIV-1, other region (e.g., integrase, fusion)
87902	Hepatitis C virus
87903	Infectious agent phenotype analysis by nucleic acid (DNA or RNA); HIV 1, through 10 drugs tested
87904	each additional drug tested (List separately in addition to primary procedure)

SARS-COV-2 2019

CODE	DESCRIPTION
86328	Test for detection of severe acute respiratory syndrome coronavirus 2 (covid-19) antibody, qualitative or semiquantitative
86769	Measure of severe acute respiratory syndrome coronavirus 2 (covid-19) antibody
87426	Detection test by immunoassay technique for severe acute respiratory syndrome coronavirus
87428	Infectious agent antigen detection by immunoassay technique, (e.g., enzyme immunoassay [EIA], enzyme-linked immunosorbent assay [ELISA], fluorescence immunoassay [FIA], immunochemiluminometric assay [IMCA]) qualitative or semiquantitative; severe acute respiratory syndrome coronavirus (e.g., sars-cov, sars-cov-2 [covid-19]) and influenza virus types a and b
87593	Orthopoxvirus (e.g., monkeypox virus, cowpox virus, vaccinia virus), amplified probe technique, each
87635	Amplified dna or rna probe detection of severe acute respiratory syndrome coronavirus 2 (covid-19) antigen
87636	Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]) and influenza virus types a and b, multiplex amplified probe technique
87637	Infectious agent detection by nucleic acid (DNA or RNA); severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19]), influenza virus types a and b, and respiratory syncytial virus, multiplex amplified probe technique
87811	Infectious agent antigen detection by immunoassay with direct optical (i.e., visual) observation; severe acute respiratory syndrome coronavirus 2 (sars-cov-2) (coronavirus disease [covid-19])

U0002	2019-ncov coronavirus, sars-cov-2/2019-ncov (covid-19), any technique, multiple types or subtypes (includes all targets), non-cdc

CYTOPATHOLOGY

CODE	DESCRIPTION
88104	Cytopathology, fluids, washings or brushings, except cervical or vaginal; smears with interpretation
88106	simple filter method with interpretation
88108	Cytopathology, concentration technique, smears and interpretation (e.g., Saccomanno technique)
88112	Cytopathology, selective cellular enhancement technique with interpretation (e.g., liquid based slide preparation method), except cervical or vaginal (Do not report 88112 with 88108)
88120	Cytopathology, in situ hybridization (e.g., FISH), urinary tract specimen with morphometric analysis, 3-5 molecular probes, each specimen; manual
88121	using computer-assisted technology
88141	Cytopathology, cervical or vaginal (any reporting system); requiring interpretation by physician (List separately in addition to code for technical service)
88142	Cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation; manual screening under physician supervision
88143	with manual screening and rescreening under physician supervision
88147	Cytopathology smears, cervical or vaginal; screening by automated system under physician supervision
88148	screening by automated system with manual re-screening under physician supervision
88150	Cytopathology, slides, cervical or vaginal; manual screening under physician supervision
88153	with manual screening and rescreening under physician supervision
88160	Cytopathology, smears, any other source (specify); screening and interpretation
88161	preparation, screening and interpretation
88162	extended study involving over 5 slides and/or multiple stains
88164	Cytopathology, slides, cervical or vaginal (the Bethesda System); manual screening under physician supervision
88165	with manual screening and rescreening under physician supervision
88173	Cytopathology, evaluation of fine needle aspirate; interpretation and report
88174	Cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation; screening by automated system, under physician supervision
88175	with screening by automated system and manual rescreening or review under physician supervision (See Rule 22 for instrumented PAP screening definitions)
88184	Flow cytometry, cell surface, cytoplasmic, or nuclear marker, technical component only; first marker

88185	each additional marker (List separately in addition to code for first marker)
88187	Flow cytometry, interpretation; 2 to 8 markers
88188	9 to 15 markers
88189	16 or more markers
88365	In situ hybridization (e.g., FISH), per specimen; initial single probe stain procedure
88364	each additional single probe stain procedure (List separately in addition to code for primary procedure)
88366	each multiplex probe stain procedure
88367	Morphometric analysis, in situ hybridization (quantitative or semi-quantitative), using computer-assisted technology, per specimen; initial single probe stain procedure
88373	each additional single probe stain procedure (List separately in addition to code for primary procedure)
88374	each multiplex probe stain procedure
88368	Morphometric analysis, in situ hybridization (quantitative or semi-quantitative), manual, per specimen; each multiplex probe stain procedure
88369	each additional single probe stain procedure (List separately in addition to code for primary procedure)
88377	each multiplex probe stain procedure

CYTOGENETIC STUDIES

Cytogenetic studies procedure codes 88245, 88267 and 88269 must be billed in combination with procedure code 88280 to report a 2-karyotype chromosome analysis as described in the quality control standards for cytogenetic licensure.

CODE	DESCRIPTION
88230	Tissue culture for non-neoplastic disorders; lymphocyte
88233	skin or other solid tissue biopsy
88235	amniotic fluid or chorionic villus cells
88237	Tissue culture for neoplastic disorders; bone marrow, blood cells
88239	solid tumor
88245	Chromosome analysis for breakage syndromes; baseline Sister Chromatid Exchange (SCE), 20-25 cells
88248	baseline breakage, score 50-100 cells, count 20 cells, 2 karyotypes (e.g., for ataxia telangiectasia, Fanconi anemia, fragile X)
88249	score 100 cells, clastogen stress (e.g., diepoxybutane, mitomycin C, ionizing radiation, UV radiation)
88262	Chromosome analysis; count 15-20 cells, 2 karyotypes, with banding
88263	count 45 cells for mosaicism, 2 karyotypes, with banding
88267	Chromosome analysis, amniotic fluid or chorionic villus, count 15 cells, 1 karyotype, with banding
88269	Chromosome analysis, in situ for amniotic fluid cells, count cells from 6-12 colonies, 1 karyotype, with banding

88271 Molecular cytogenetics; DNA probe, each (e.g., FISH)
88272 chromosomal in situ hybridization, analyze 3-5 cells (e.g., for derivatives and markers)
88273 chromosomal in situ hybridization, analyze 10-30 cells (e.g., for microdeletions)
88274 interphase in situ hybridization, analyze 25-99 cells
88275 interphase in situ hybridization, analyze 100-300 cells
88280 Chromosome analysis; additional karyotypes, each study (Use in addition to code 88267, 88269)
88285 additional cells counted, each study (Use in addition to code 88269)
88291 Cytogenetics and molecular cytogenetics, interpretation, and report

SURGICAL PATHOLOGY

Surgical pathology procedure codes are reimbursable per specimen. A specimen is defined as tissue or tissues that is (are) submitted for individual and separate attention, requiring individual examination and pathologic diagnosis. Any unlisted specimen should be assigned to the code which most closely reflects the work involved when compared to other specimens assigned to that code.

88302 LEVEL II - Surgical pathology, gross and microscopic examination

Appendix, Incidental
Fallopian Tube, Sterilization
Fingers/Toes, Amputation, Traumatic
Foreskin, Newborn
Hernia Sac, Any Location
Hydrocele Sac
Nerve
Skin, Plastic Repair
Sympathetic Ganglion
Testis, Castration
Vaginal Mucosa, Incidental
Vas Deferens, Sterilization

88304 LEVEL III - Surgical pathology, gross and microscopic examination

Abortion, Induced
Abscess
Aneurysm - Arterial/Ventricular
Anus, Tag
Appendix, Other than Incidental
Artery, Atheromatous Plaque
Bartholin's Gland Cyst
Bone Fragment(s), Other than Pathologic Fracture
Bursa/Synovial Cyst
Carpal Tunnel Tissue
Cartilage, Shavings
Cholesteatoma
Colon, Colostomy Stoma
Conjunctiva - Biopsy/Pterygium
Cornea
Diverticulum - Esophagus/Small Intestine
Dupuytren's Contracture Tissue
Femoral Head, Other than Fracture
Fissure/Fistula
Foreskin, Other than Newborn
Gallbladder
Ganglion Cyst
Hematoma
Hemorrhoids
Hydatid of Morgagni
Intervertebral Disc
Joint, Loose Body
Meniscus
Mucocele, Salivary
Neuroma - Morton's/Traumatic
Pilonidal Cyst/Sinus
Polyps, Inflammatory - Nasal/Sinusoidal
Skin - Cyst/Tag/Debridement
Soft Tissue, Debridement
Soft Tissue, Lipoma
Spermatocele
Tendon/Tendon Sheath
Testicular Appendage
Thrombus or Embolus
Tonsil and/or Adenoids
Varicocele
Vas Deferens, Other than Sterilization
Vein, Varicosity

88305 LEVEL IV - Surgical pathology, gross and microscopic examination

Abortion – Spontaneous/ Missed
Artery, Biopsy
Bone Marrow, Biopsy
Bone, Exostosis
Brain/Meninges, Other than For Tumor Resection
Breast, Biopsy, Not Requiring Microscopic Evaluation of Surgical Margins
Breast, Reduction Mammoplasty
Bronchus, Biopsy
Cell Block, Any Source
Gingiva/Oral Mucosa, Biopsy
Heart Valve
Joint, Resection
Kidney, Biopsy
Larynx, Biopsy
Leiomyoma (s), Uterine Myomectomy without Uterus
Lip, Biopsy/Wedge Resection
Lung, Transbronchial Biopsy
Lymph Node, Biopsy
Muscle, Biopsy
Nasal Mucosa, Biopsy
Nasopharynx/Oropharynx,
Polyp, Colorectal
Polyp, Stomach/Small Intestine
Prostate, Needle Biopsy
Prostate, TUR
Salivary Gland, Biopsy
Sinus, Paranasal Biopsy
Skin, Other than Cyst/Tag/ Debridement/Plastic Repair
Small Intestine, Biopsy
Soft Tissue, Other than Tumor/Mass/Lipoma/Debridement
Spleen
Stomach, Biopsy

Cervix, Biopsy
Colon, Biopsy
Duodenum, Biopsy
Endocervix, Curettings/Biopsy
Endometrium Curettings/Biopsy
Esophagus, Biopsy
Extremity, Amputation, Traumatic
Fallopian Tube, Biopsy
Fallopian Tube, Ectopic Pregnancy
Femoral Head, Fracture
Finger/Toes, Amputation, Non-traumatic
Biopsy
Nerve, Biopsy
Odontogenic/Dental Cyst
Omentum, Biopsy
Ovary with or without Tube, Non-neoplastic
Ovary, Biopsy/ Wedge Resection
Parathyroid Gland
Peritoneum, Biopsy
Pituitary Tumor
Placenta, Other than Third Trimester
Pleura/Pericardium-Biopsy/Tissue
Polyp, Cervical/Endometrial
Synovium
Testis, Other than Tumor/ Biopsy/Castration
Thyroglossal Duct/Brachial Cleft Cyst
Tongue, Biopsy
Tonsil, Biopsy
Trachea, Biopsy
Ureter, Biopsy
Urethra, Biopsy
Urinary Bladder, Biopsy
Uterus, with or without Tubes & Ovaries, for Prolapse
Vagina, Biopsy
Vulva/Labia, Biopsy

88307 LEVEL V - Surgical pathology, gross and microscopic examination

Adrenal, Resection
Bone - Biopsy/Curettings
Bone Fragment(s), Pathologic Fracture
Brain, Biopsy
Brain/Meninges, Tumor Resection
Breast, Excision of Lesion, Requiring Microscopic Evaluation of Surgical Margins
Breast, Mastectomy - Partial/Simple
Cervix, Conization
Colon, Segmental Resection, Other than for Tumor
Extremity, Amputation, Non-traumatic
Eye, Enucleation
Kidney, Partial/Total Nephrectomy
Larynx, Partial/Total Resection
Liver, Biopsy - Needle/Wedge
Liver, Partial Resection
Lung, Wedge Biopsy
Lymph Nodes, Regional Resection
Mediastinum, Mass
Myocardium, Biopsy
Odontogenic Tumor
Ovary with or without Tube, Neoplastic
Pancreas, Biopsy
Placenta, Third Trimester
Prostate, Except Radical Resection
Salivary Gland
Sentinel Lymph Node
Small Intestine, Resection, Other than for Tumor
Soft Tissue Mass (except Lipoma) - Biopsy/Simple Excision
Stomach - Subtotal/Total Resection, Other than for Tumor
Testis, Biopsy
Thymus, Tumor
Thyroid, Total/Lobe
Ureter, Resection
Urinary Bladder, TUR
Uterus, with or without Tubes and Ovaries, Other than Neoplastic/Prolapse

88309 LEVEL VI - Surgical pathology, gross and microscopic examination

Bone Resection
Breast, Mastectomy - with Regional Lymph Nodes
Colon, Segmental Resection for Tumor
Colon, Total Resection
Esophagus, Partial/ Total Resection
Extremity, Disarticulation
Fetus, with Dissection
Larynx, Partial/Total Resection - with Regional
Lung - Total/Lobe/ Segment Resection
Pancreas - Total/Subtotal Resection
Prostate, Radical Resection
Small Intestine, Resection for Tumor
Soft Tissue Tumor, Extensive Resection
Stomach - Subtotal/Total Resection, Tumor Lymph Nodes
Testis, Tumor
Tongue/Tonsil - Resection for Tumor
Urinary Bladder, Partial/ Total Resection
Uterus, with or without Tubes & Ovaries, Neoplastic
Vulva - Total/ Subtotal Resection

CODE	DESCRIPTION
80503	Pathology clinical consultation for clinical problem, 5-20 minutes
80504	for moderately complex clinical problem, 21-40 minutes
80505	for complex clinical problem, 41-60 minutes
80506	additional 30 minutes
88312	Special stain including interpretation and report; Group I for microorganisms (e.g., acid fast, methenamine silver) (Report one unit of 88312 for each special stain, on each surgical pathology block, cytologic specimen, or hematologic smear)

88313	Group II, all other (e.g., iron, trichrome), except stain for microorganisms, stains for enzyme constituents, or immunocytochemistry and immunohistochemistry (Report one unit of 88313 for each special stain, on each surgical pathology block, cytologic specimen, or hematologic smear)
88319	Group III, for enzyme constituents (For each stain on each surgical pathology block, cytologic specimen, or hematologic smear, use one unit of 88319)
88342	Immunohistochemistry or immunocytochemistry, per specimen; initial single antibody stain procedure (For immunophenotyping, see Rule 18)
88341	Immunohistochemistry of immunocytochemistry, per specimen; each additional single antibody stain procedure (List separately in addition to code for primary procedure)
88344	each multiplex antibody stain procedure
88346	Immunofluorescence, per specimen; initial single antibody stain procedure
88350	each additional single antibody stain procedure (List separately in addition to code for primary procedure.)
88356	Morphometric analysis; nerve
88360	Morphometric analysis, tumor immunohistochemistry (e.g., Her-2/Neu, estrogen receptor/progesterone receptor), quantitative or semiquantitative, per specimen, each single antibody stain procedure; manual
88361	using computer assisted technology (computer generated) (Do not report 88360 or 88361 with 88342 unless each procedure is for a different antibody) (When semi-thin plastic-embedded sections are performed in conjunction with morphometric analysis, only the morphometric analysis should be reported; if performed as an independent procedure, see codes 88302-88309 for surgical pathology)

OTHER PROCEDURES

CODE	DESCRIPTION
89050	Cell count, miscellaneous body fluids (e.g., cerebrospinal fluid, joint fluid), except blood;
89051	with differential count
89055	Leukocyte assessment, fecal, qualitative or semiquantitative
89060	Crystal identification by light microscopy with or without polarizing lens analysis, tissue, or any body fluid (except urine)
89190	Nasal smear for eosinophils
89230	Sweat collection by iontophoresis (includes analysis)
89321	Semen analysis; sperm presence and motility of sperm, if performed
91065	Breath hydrogen or methane test (e.g., for detection of lactase deficiency, fructose intolerance, bacterial overgrowth, or oro-cecal gastrointestinal transit)
G0480	Drug test(s), definitive, utilizing drug identification methods able to identify individual drugs and distinguish between structural isomers (See Rule 5B)
P9604	Travel allowance one way in connection with medically necessary laboratory specimen collection drawn from home bound or nursing home bound patient; prorated trip charge (Limited to home bound phlebotomy; see Rule 23)

S3840	DNA analysis for germline mutations of the RET proto-oncogene for susceptibility to multiple endocrine neoplasia type 2
S3842	Genetic testing for Von Hippel-Lindau disease
S3844	DNA analysis of the connexin 26 gene (GJB2) for susceptibility to congenital, profound deafness
S3846	Genetic testing for hemoglobin E beta-thalassemia
S3849	Genetic testing for Niemann-Pick disease
S3850	Genetic testing for sickle cell anemia
S3852	DNA analysis for APOE epilson 4 allele for susceptibility to Alzheimer's disease
S3853	Genetic testing for myotonic muscular dystrophy
S3861	Genetic testing, sodium channel, voltage-gated, type V, alpha subunit (SCN5A) and variants for suspected Brugada Syndrome
S3865	Comprehensive gene sequence analysis for hypertrophic cardiomyopathy
S3866	Genetic analysis for a specific gene mutation for hypertrophic cardiomyopathy (HCM) in an individual with a known HCM mutation in the family