

**Policy: MP360**

**Section: Medical Policy**

**Subject: Minimal Residual Disease NGS Testing**

### Applicable Lines of Business

<b>Commercial</b>	<b>X</b>	<b>CHIP</b>	<b>X</b>
<b>Medicare</b>	<b>X</b>	<b>ACA</b>	<b>X</b>
<b>Medicaid</b>	<b>X</b>		

### I. Policy: Minimal Residual Disease NGS Testing

#### II. Purpose/Objective:

To provide a policy of coverage regarding Minimal Residual Disease NGS Testing

#### III. Responsibility:

- A. Medical Directors
- B. Medical Management

#### IV. Required Definitions

1. Attachment – a supporting document that is developed and maintained by the policy writer or department requiring/authoring the policy.
2. Exhibit – a supporting document developed and maintained in a department other than the department requiring/authoring the policy.
3. Devised – the date the policy was implemented.
4. Revised – the date of every revision to the policy, including typographical and grammatical changes.
5. Reviewed – the date documenting the annual review if the policy has no revisions necessary.

#### V. Additional Definitions

Medical Necessity or Medically Necessary means Covered Services rendered by a Health Care Provider that the Plan determines are:

- a. appropriate for the symptoms and diagnosis or treatment of the Member's condition, illness, disease or injury;
- b. provided for the diagnosis, and the direct care and treatment of the Member's condition, illness disease or injury;
- c. in accordance with current standards of good medical treatment practiced by the general medical community.
- d. not primarily for the convenience of the Member, or the Member's Health Care Provider; and
- e. the most appropriate source or level of service that can safely be provided to the Member. When applied to hospitalization, this further means that the Member requires acute care as an inpatient due to the nature of the services rendered or the Member's condition, and the Member cannot receive safe or adequate care as an outpatient.

#### Medicaid Business Segment

Medically Necessary — A service, item, procedure, or level of care that is necessary for the proper treatment or management of an illness, injury, or disability is one that:

- Will, or is reasonably expected to, prevent the onset of an illness, condition, injury or disability.

- Will, or is reasonably expected to, reduce or ameliorate the physical, mental or developmental effects of an illness, condition, injury or disability.
- Will assist the Member to achieve or maintain maximum functional capacity in performing daily activities, taking into account both the functional capacity of the Member and those functional capacities that are appropriate for Members of the same age

**DESCRIPTION:**

Minimal Residual Disease (MRD) refers to a subclinical measure of cancer burden that remains during and following treatment. MRD status is a reliable indicator of clinical outcome and response to therapy and can be used for risk stratification and to guide treatment options when used in conjunction with other clinical and molecular data in acute lymphoblastic leukemia (ALL), acute myeloid leukemia (AML), and multiple myeloma (MM).

**Signatera** is a personalized molecular residual disease assay (MRD) using circulating tumor DNA (ctDNA), custom designed for each patient to help identify relapse of disease. The Signatera test is personalized and tumor-informed, tailored to fit the unique signature of clonal mutations found in that individual's tumor.

**ClonoSeq**

**INDICATIONS:**

MRD testing (e.g., clonoSEQ) is considered to be medically necessary when performed in members with:

**Multiple myeloma:**

- During surveillance after response to primary treatment
- After each treatment phase (e.g. after induction therapy, high-dose therapy/autologous stem-cell transplantation, consolidation, and maintenance)

**Acute myeloid leukemia:**

- At completion of initial induction therapy
- Prior to allogeneic transplantation
- Periodic retesting guided by the regimen used

**Acute lymphoblastic leukemia:**

- At completion of initial induction therapy
- Periodic retesting guided by the regimen used
- Serial monitoring in members with molecular relapse or persistent low-level disease burden

**Chronic lymphocytic leukemia or small lymphocytic lymphoma**

- After completion of treatment
- For consideration of therapy with lenalidomide for high-risk patients after first-line therapy

**Guardant Reveal**

**INDICATIONS:**

MRD testing (ctDNA Guardant Reveal) is considered to be medically necessary when performed in members with:

**Colorectal Cancer**

- Early-stage colorectal cancer
- Recurrence monitoring after curative intent treatment

**For the Medicare and Medicaid Business Segments**

Although there is no National Coverage Determination issued for this service, CMS directives may allow Signatera ClonoSeq and/or Guardant Reveal testing to be considered for coverage when used to predict risk of recurrence risk in patients with colon cancer. Effective 12/26/2021 Palmetto GBA established a formal coverage policy for all Medicare patients. This local carrier determination is applicable nationally. Please refer to policy number A58376 on Centers for Medicare & Medicaid Services website. Coverage criteria under the policy have been met for (1) the diagnosis of disease progression, recurrence, or relapse for colon cancer and (2) monitoring of response to immune-checkpoint inhibitor therapy for any solid tumor.

Coverage of ClonoSeq (baseline assay and multiple follow-up assays) is indicated for Acute lymphoblastic leukemia (ALL), Multiple myeloma (MM), and Chronic lymphocytic leukemia (CLL). Since Adaptive Biotechnologies is located in Seattle Washington, Noridian Healthcare Solutions, LLC policy A58997 applies.

## NavDx Test

Per MoDx policy L38779, the NavDx test is considered to be medically necessary for the surveillance of recurrence in members with a personal history of documented HPV-driven oropharyngeal cancer, who presently have no evidence of disease, starting three months following completion of any regimen of curative intent therapy, with a frequency of:

- not more often than every three months for the first 24 months thereafter,
- not more often than every six months for the next 36 months thereafter,
- not more often than annually thereafter until if and when a positive test result is detected.

## EXCLUSIONS:

The use of MRD NGS testing for indications not specified in this policy will be considered **experimental, investigational or unproven** and therefore, **NOT COVERED**.

**Note: A complete description of the process by which a given technology or service is evaluated and determined to be experimental, investigational or unproven is outlined in MP 15 - Experimental Investigational or Unproven Services or Treatment.**

## Medicaid Business Segment:

Any requests for services, that do not meet criteria set in the PARP, may be evaluated on a case by case basis.

## CODING ASSOCIATED WITH:

*The following codes are included below for informational purposes and may not be all inclusive. Inclusion of a procedure or device code(s) does not constitute or imply coverage nor does it imply or guarantee provider reimbursement. Coverage is determined by the member specific benefit plan document and any applicable laws regarding coverage of specific services. Please note that per Medicare coverage rules, only specific CPT/HCPCS Codes may be covered for the Medicare Business Segment. Please consult the CMS website at [www.cms.gov](http://www.cms.gov) or the local Medicare Administrative Carrier (MAC) for more information on Medicare coverage and coding requirements.*

- 81479 Unlisted molecular pathology procedure
- 81450 Targeted genomic sequence analysis panel, hematolymphoid neoplasm or disorder, DNA analysis, and RNA analysis when performed, 5-50 genes (EG, BRAF, CEBPA, DNMT3A, EZH2, FLT3, IDH1, IDH2, JAK2, KRAS, KIT, MLL, NRAS, NPM1, NOTCH1), interrogation for sequence variants, and copy number variants or rearrangements, or isoform expression or MRNA expression levels, if performed {ClonoSeq}
- 81445 Targeted genomic sequence analysis panel, solid organ neoplasm, 5-50 genes (EG, ALK, BRAF, CDKN2A, EGFR, ERBB2, KIT, KRAS, MET, NRAS, PDGFRA, PDGFRB, PGR, PIK3CA, PTEN, RET), interrogation for sequence variants and copy number variants or rearrangements, if performed; DNA analysis or combined DNA and RNA analysis.
- 0306U Oncology (minimal residual disease [MRD]), next-generation targeted sequencing analysis, cell-free DNA, initial (baseline) assessment to determine a patient specific panel for future comparisons to evaluate for MRD
- 0307U Oncology (minimal residual disease [MRD]), next-generation targeted sequencing analysis of a patient-specific panel, cell-free DNA, subsequent assessment with comparison to previously analyzed patient specimens to evaluate for MRD
- 0340U Oncology (pan-cancer), analysis of minimal residual disease (MRD) from plasma, with assays personalized to each patient based on prior next-generation sequencing of the patient's tumor and germline DNA, reported as absence or presence of MRD, with disease-burden correlation, if appropriate {Signatera™}
- 0364U Oncology (hematolymphoid neoplasm), genomic sequence analysis using multiplex (PCR) and next-generation sequencing with algorithm, quantification of dominant clonal sequence(s), reported as presence or absence of minimal residual disease (MRD) with quantitation of disease burden, when appropriate {ClonoSeq}
- 0356U Oncology (oropharyngeal or anal), evaluation of 17 DNA biomarkers using droplet digital PCR (ddPCR), cell-free DNA, algorithm reported as a prognostic risk score for cancer recurrence. {NavDx}

Current Procedural Terminology (CPT®) © American Medical Association: Chicago, IL

## LINE OF BUSINESS:

**Eligibility and contract specific benefits, limitations and/or exclusions will apply. Coverage statements found in the line of business specific benefit document will supersede this policy. For Medicare, applicable LCD's and NCD's will supercede this policy. For PA Medicaid Business segment, this policy applies as written.**

## REFERENCES:

- National Comprehensive Cancer Network® (NCCN). Clinical Practice Guidelines in Oncology Acute Lymphoblastic Leukemia V4.2021
- National Comprehensive Cancer Network® (NCCN). Clinical Practice Guidelines in Oncology Hairy Cell Leukemia V1.2022
- National Comprehensive Cancer Network® (NCCN) Clinical Practice Guidelines in Oncology Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma. V1.2022
- National Comprehensive Cancer Network® (NCCN). Clinical Practice Guidelines in Oncology Hodgkin Lymphoma V.1.2022
- National Comprehensive Cancer Network® (NCCN). Clinical Practice Guidelines in Oncology Multiple Myeloma V4.2022
- National Comprehensive Cancer Network® (NCCN). Clinical Practice Guidelines in Oncology Colon Cancer v1.2022
- Thompson PA, Srivastava J, Peterson C, et al. Minimal residual disease undetectable by next-generation sequencing predicts improved outcome in CLL after chemoimmunotherapy. *Blood*. 2019; 134(22):1951-1959
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- Wood, B., Wu, D., Crossley, B., Dai, Y., Williamson, et al. Measurable residual disease detection by high-throughput sequencing improves risk stratification for pediatric B-ALL. *Blood*, 2018;131(12), 1350-1359.
- Luskin, M. R., Murakami, M. A., Manalis, S. R., & Weinstock, D. M. Targeting minimal residual disease: a path to cure? *Nat Rev Cancer*, 2018;18(4), 255-263.
- Medina, A., Puig, N., Flores-Montero, J., et al. Comparison of next-generation sequencing (NGS) and next-generation flow (NGF) for minimal residual disease (MRD) assessment in multiple myeloma. *Blood Cancer J*, 2020; 10(10), 108.
- Del Giudice, I., Raponi, S., Della Starza, I., De Propriis, et al. Minimal Residual Disease in Chronic Lymphocytic Leukemia: A New Goal? *Front Oncol*, 2019;9, 689.
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- Bai, Y., Orfao, A., & Chim, C. S. Molecular detection of minimal residual disease in multiple myeloma. *Br J Haematol*, 2018;181(1), 11-26. d
- Goicoechea, I., Puig, N., Cedena, M. T., Burgos, L., et al. Deep MRD profiling defines outcome and unveils different modes of treatment resistance in standard- and high-risk myeloma. *Blood*, 2021;137(1), 49-60.
- Ching T, Duncan ME, Newman-Eerkes T, McWhorter MME, Tracy JM, Steen et al Analytical evaluation of the clonoSEQ Assay for establishing measurable (minimal) residual disease in acute lymphoblastic leukemia, chronic lymphocytic leukemia, and multiple myeloma. *BMC Cancer*, 2020;20(1):612.
- Monter A, Nomdedéu JF. ClonoSEQ assay for the detection of lymphoid malignancies. *Expert Rev Mol Diagn*, 2019;19(7):571–578.
- Balagopal V, Hantel A, Kadri S, et al. Measurable residual disease monitoring for patients with acute myeloid leukemia following hematopoietic cell transplantation using error corrected hybrid capture next generation sequencing. *PLoS One*. 2019;14(10):e0224097.
- MolDX: ClonoSEQ® Assay for Assessment of Minimal Residual Disease (MRD) in Patients with Specific Lymphoid Malignancies (A56307). Local coverage article.
- MolDX: Minimal Residual Disease Testing for Colorectal Cancer L38290, L38779

Loupakis F, Sharma S, Derouazi M, et al. Detection of molecular residual disease using personalized circulating tumor DNA assay in patients with colorectal cancer undergoing resection of metastases. JCO Precis Oncol. 2021;5:PO.21.00101

Parikh AR, Van Seventer EE, et al. Minimal residual disease detection using a plasma-only circulating tumor DNA assay in colorectal cancer patients. Clin Cancer Res. 2021 doi:10.1158/1078-0432.CCR-21-0410

Geisinger Health Plan Technology Assessment Committee, NavDx Testing, Sept. 2023 (15 references)

This policy will be revised as necessary and reviewed no less than annually.

**Devised:** 6/22

**Revised:** 6/23 (add indication); 12/23 (add NavDx for Medicare)

**Reviewed:**

Geisinger Health Plan may refer collectively to health care coverage sponsors Geisinger Health Plan, Geisinger Quality Options, Inc., and Geisinger Indemnity Insurance Company, unless otherwise noted. Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.

Coverage for experimental or investigational treatments, services and procedures is specifically excluded under the member's certificate with Geisinger Health Plan. Unproven services outside of an approved clinical trial are also specifically excluded under the member's certificate with Geisinger Health Plan. This policy does not expand coverage to services or items specifically excluded from coverage in the member's certificate with Geisinger Health Plan. Additional information can be found in MP015 Experimental, Investigational or Unproven Services.

Prior authorization and/or pre-certification requirements for services or items may apply. Pre-certification lists may be found in the member's contract specific benefit document. Prior authorization requirements can be found at <https://www.geisinger.org/health-plan/providers/ghp-clinical-policies>

Please be advised that the use of the logos, service marks or names of Geisinger Health Plan, Geisinger Quality Options, Inc. and Geisinger Indemnity Insurance Company on a marketing, press releases or any communication piece regarding the contents of this medical policy is strictly prohibited without the prior written consent of Geisinger Health Plan. Additionally, the above medical policy does not confer any endorsement by Geisinger Health Plan, Geisinger Quality Options, Inc. and Geisinger Indemnity Insurance Company regarding the medical service, medical device or medical lab test described under this medical policy.