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Genetic Testing for Lynch Syndrome (Hereditary Nonpolyposis Colorectal Cancer)

MP9487

Covered Service: Yes

Prior Authorization Required: Yes

Additional Information: Genetic testing is covered for a Prevea360 Health Plan member if the test results provide a direct medical benefit or guides reproductive decision-making for the Prevea360 Health Plan member. See [Genetic Testing MP9012](#) for additional information

Pre and post-test genetic counseling is required for any individual undergoing genetic testing for hereditary breast and ovarian cancer syndromes.

Allowed once per lifetime in adults 18 years of age or older.

A first-degree relative is defined as an individual's parents, full siblings, and children.

A second-degree relative is defined as an individual's grandparents, grandchildren, aunts, uncles, nephews, nieces and half-siblings.

A third-degree relative is defined as first cousins, great-aunts, great-uncles, great-grandchildren, or great-grandparents.

Prevea360 Health Plan Medical Policy:

1.0 Genetic testing for Lynch Syndrome (**EPCAM, MLH1, MSH2, MSH6, and PMS2**) gene testing **requires prior authorization** through the Health Services Division and is considered medically necessary when **ANY** of the following are met:

Personal History

- 1.1 Personal history of colorectal cancer or endometrial cancer with high microsatellite instability or pathologic immunohistochemistry on cancer tissue testing, when testing is targeted to the gene(s) of suspicion based on the results of the tumor testing
- 1.2 Personal history member meets Amsterdam II criteria or revised Bethesda guidelines are met and **one** of the following are met:
 - 1.2.1 Colorectal cancer diagnosed in a member younger than age 50

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- 1.2.2 Colorectal cancer and **1 or more** additional positively diagnosed tumors associated with Lynch syndrome regardless of age
- 1.2.3 Presence of synchronous (simultaneous) or metachronous (diagnosed at different times) colorectal cancer or other Lynch syndrome related cancer**, regardless of age
- 1.2.4 Colorectal cancer with the MSI-H histology (e.g. presence of tumor-infiltrating lymphocytes, Crohn's-like lymphocytic reaction, mucinous/signet-ring differentiation, or medullary growth pattern) diagnosed in an individual who is under age 60
- 1.2.5 Colorectal or endometrial cancer diagnosed in a member with one or more first-degree or second-degree relatives with a Lynch syndrome related cancer**, with one of the cancers diagnosed under age 50
- 1.2.6 Colorectal or endometrial cancer diagnosed in a member with two or more first- or second-degree relatives with a Lynch syndrome related cancer**, regardless of age.
- 1.2.7 Personal history of colorectal cancer or endometrial cancer with high microsatellite instability or pathologic immunohistochemistry on cancer tissue testing.
- 1.2.8 Personal history of endometrial cancer diagnosed before age 50 years
- 1.3 Individual with $\geq 5\%$ risk of Lynch syndrome on a mutation prediction model (e.g. MMRpro, PREMM5 or MMRpredict).
- 1.4 First degree, second degree, or third degree relative of person with known EPCAM, MLH1, MSH2, MSH6 or PMS2 gene mutation by DNA sequencing testing, when testing is targeted to the known familial mutation.

Family History

- 1.5 An individual without a personal history of cancer who has family history of **ANY** of the following:
 - 1.5.1 First-degree relative of person with known EPCAM, MLH1, MSH2, MSH6, or PMS2 gene mutation by DNA sequence testing
 - 1.5.2 At least one or more first-degree relatives with colorectal or Lynch syndrome-related tumor before age 50 years
 - 1.5.3 At least one or more first-degree relatives with colorectal or endometrial cancer, and another synchronous or metachronous Lynch syndrome-related cancer**
 - 1.5.4 At least two or more first- or second-degree relatives diagnosed with colorectal cancer or Lynch syndrome-related tumor, with at least one diagnosed prior to age 50 years

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1.5.5 At least three or more first- or second-degree relatives with Lynch syndrome- related cancers**, regardless of age

2.0 Prevea360 Health Plan considers multigene hereditary cancer panels that accompany Lynch syndrome genes experimental and investigational and therefore not medically necessary. There is insufficient published evidence to support their clinical utility and validity. The only Lynch syndrome panels that are considered medically necessary are the five genes noted above exclusively.

NOTE: Lynch-related cancers: colorectal, endometrial, keratoacanthoma, stomach, ovarian, small bowel, ureter or renal pelvis, sebaceous adenoma or carcinoma, hepatobiliary, pancreas, brain cancer.**

CPT/HCPCS Codes Related to MP9487

* The list of codes (and their descriptors, if any) is provided for informational purposes only and may not be all inclusive or current. Listing of a code in this medical policy does not imply that the service described by the code is a covered or non-covered service. Benefit coverage for any service is determined by the member's policy of health coverage with Prevea360 Health Plan. Inclusion of a code above does not imply any right to reimbursement or guarantee claim payment. Other medical policies may also apply.

CPT Code:	CPT Code Description:
0101U	Hereditary colon cancer disorders (eg, Lynch syndrome, PTEN hamartoma syndrome, Cowden syndrome, familial adenomatosis polyposis), genomic sequence analysis panel utilizing a combination of NGS, Sanger, MLPA, and array CGH, with mRNA analytics to resolve variants of unknown significance when indicated (15 genes [sequencing and deletion/duplication], EPCAM and GREM1 [deletion/duplication only])
0238U	Hereditary colon cancer disorders (eg, Lynch syndrome, PTEN hamartoma syndrome, Cowden syndrome, familial adenomatosis polyposis), targeted mRNA sequence analysis panel (APC, CDH1, CHEK2, MLH1, MSH2, MSH6, MUTYH, PMS2, PTEN, and TP53) (List separately in addition to code for primary procedure)
0130U	Hereditary colon cancer disorders (eg, Lynch syndrome, PTEN hamartoma syndrome, Cowden syndrome, familial adenomatosis polyposis), targeted mRNA sequence analysis panel (APC, CDH1, CHEK2, MLH1, MSH2, MSH6, MUTYH, PMS2, PTEN, and TP53) (List separately in addition to code for primary procedure)

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CPT Code:	CPT Code Description:
0158U	MLH1 (mutL homolog 1) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) mRNA sequence analysis (List separately in addition to code for primary procedure) (e.g. Custom Next + RNA: MLHI)
0159U	MSH2 (mutS homolog 2) (eg, hereditary colon cancer, Lynch syndrome) mRNA sequence analysis (List separately in addition to code for primary procedure) (e.g. CustomNext + RNA: MSH2)
0160U	MSH6 (mutS homolog 6) (eg, hereditary colon cancer, Lynch syndrome) mRNA sequence analysis (List separately in addition to code for primary procedure) (e.g. CustomNext + RNA: MSH6)
0161U	PMS2 (PMS1 homolog 2, mismatch repair system component) (eg, hereditary non-polyposis colorectal cancer, Lynch syndrome) mRNA sequence analysis (List separately in addition to code for primary procedure) (e.g. CustomNext + RNA: PMS2)
0162U	Hereditary colon cancer (Lynch syndrome), targeted mRNA sequence analysis panel (MLH1, MSH2, MSH6, PMS2) (List separately in addition to code for primary procedure)
0238U	Oncology (Lynch syndrome), genomic DNA sequence analysis of MLH1, MSH2, MSH6, PMS2, and EPCAM, including small sequence changes in exonic and intronic regions, deletions, duplications, mobile element insertions, and variants in non-uniquely mappable regions (e.g. CustomNext + RNA: Lynch)
81201	APC (adenomatous polyposis coli) (e.g., familial adenomatosis polyposis [FAP], attenuated FAP) gene analysis; full gene sequence
81203	APC (adenomatous polyposis coli) (e.g., familial adenomatosis polyposis [FAP], attenuated FAP) gene analysis; duplication/deletion variants
81288	MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; promoter methylation analysis
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	MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants
81294	MLH1 (mutL homolog 1, colon cancer, nonpolyposis type 2) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants

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CPT Code:	CPT Code Description:
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	MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants
81297	MSH2 (mutS homolog 2, colon cancer, nonpolyposis type 1) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; 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	MSH6 (mutS homolog 6 [E. coli]) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants
81300	MSH6 (mutS homolog 6 [E. coli]) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants
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
81317	PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; full sequence analysis
81318	PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; known familial variants
81319	PMS2 (postmeiotic segregation increased 2 [S. cerevisiae]) (e.g., hereditary non-polyposis colorectal cancer, Lynch syndrome) gene analysis; duplication/deletion variants
81403	Molecular Pathology Procedure Level 4

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CPT Code:	CPT Code Description:
81435	Hereditary colon cancer disorders (e.g., Lynch syndrome, PTEN hamartoma syndrome, Cowden syndrome, familial adenomatosis polyposis); genomic sequence analysis panel, must include sequencing of at least 10 genes, including APC, BMPR1A, CDH1, MLH1, MSH2, MSH6, MUTYH, PTEN, SMAD4, and STK11
81436	Hereditary colon cancer disorders (e.g., Lynch syndrome, PTEN hamartoma syndrome, Cowden syndrome, familial adenomatosis polyposis); duplication/deletion analysis panel, must include analysis of at least 5 genes, including MLH1, MSH2, EPCAM, SMAD4, and STK11
81479	Unlisted molecular pathology procedure

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