Genetic Testing for Methylene Tetrahydrofolate Reductase

Effective Date: 03/28/2024
Revision Date: 03/28/2024
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Policy Number: HUM-0543-009
Line of Business: Commercial

Medical Coverage Policy

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Related Medical/Pharmacy Coverage Policies

None

Description

The methylene tetrahydrofolate reductase (MTHFR) enzyme is encoded by the *MTHFR* gene. This enzyme plays a role in processing amino acids (the building blocks of proteins) which is important for a chemical reaction involving forms of the vitamin folate and is required for the multistep process that converts the amino acid homocysteine to another amino acid, methionine. The body uses methionine to make proteins and other important compounds.

Variations in the *MTHFR* gene have been studied as risk factors for numerous conditions, including behavioral disorders, cardiovascular disease, thrombophilia, stroke, hypertension, pharmacological management or risk testing and pregnancy-related complications; however, its role remains unclear.

Humana recognizes that the field of genetic testing is rapidly changing and that other tests may become available.

Coverage Determination

Any state mandates for genetic testing for *MTHFR* take precedence over this medical coverage policy.

Genetic testing may be excluded by certificate. Please consult the member's individual certificate regarding Plan coverage.

Humana members may **NOT** be eligible under the Plan for **genetic testing for *MTHFR* (81291), individually or as part of a panel**. This is considered experimental/ investigational as it is not identified as widely used and generally accepted for the proposed use as reported in nationally recognized peer-reviewed medical literature published in the English language.

Coding Information

Any codes listed on this policy are for informational purposes only. Do not rely on the accuracy and inclusion of specific codes. Inclusion of a code does not guarantee coverage and/or reimbursement for a service or procedure.

CPT® Code(s)	Description	Comments
81291	MTHFR (5,10-methylenetetrahydrofolate reductase) (eg, hereditary hypercoagulability) gene analysis, common variants (eg, 677T, 1298C)	**Not Covered**
CPT® Category III Code(s)	**Description**	**Comments**
No code(s) identified		
HCPCS Code(s)	**Description**	**Comments**
No code(s) identified		

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Change Summary

- 03/28/2024 Annual Review, No Coverage Change.