Overview

Useful For

Incorporating and summarizing subsequent results into an overall evaluation if 1 or more molecular tests are reflexed on the MEV1 / Methemoglobinemia Evaluation

Testing Algorithm

This test is an additional consultative interpretation that summarizes all testing as well as any pertinent clinical information, and will be provided after test completion to incorporate subsequent molecular results into an overall evaluation if 1 or more of the following molecular tests are reflexed on the MEV1 / Methemoglobinemia Evaluation:

-ATHAL / Alpha-Globin Gene Analysis, Varies

-WASQR / Alpha-Globin Gene Sequencing, Blood

-WBSQR / Beta-Globin Gene Sequencing, Blood

-WBDDR / Beta-Globin Cluster Locus Deletion/Duplication, Blood

-WGSQR / Gamma-Globin Full Gene Sequencing, Varies

This summary is in addition to interpretations that may be provided for each component.

Method Name

Only orderable as a reflex. For more information see MEV1 / Methemoglobinemia Evaluation.

Medical Interpretation

NY State Available

Yes

Specimen

Specimen Type

Whole Blood EDTA

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Whole Blood EDTA	Refrigerated		

Clinical and Interpretive

Clinical Information

Hemoglobin variants can be associated with increased measured levels of methemoglobin and sulfhemoglobin. Some hemoglobin disorders can be very complex and involve abnormalities of the alpha, beta, delta, and gamma

genes. These abnormalities can be due to, not only to point alterations, but also deletions within 1 or more globin genes. Multiple genetic variants can be seen in the same patient, and molecular testing is necessary to fully evaluate such cases.

A summary interpretation that incorporates all of the testing performed is beneficial to the ordering physician.

Reference Values

Only orderable as a reflex. For more information see MEV1 / Methemoglobinemia Evaluation.

An interpretive report will be provided.

Interpretation

An interpretive report will be provided that summarizes all testing as well as any pertinent clinical information.

Cautions

No significant cautionary statements.

Clinical Reference

1. Beutler E: Methemoglobinemia and sulfhemoglobinemia. In: Beutler E, Lichtman MA, Caller BS, Kipps TJ, eds. Hematology. 5th edition. McGraw-Hill Book Company; 1995:654-663

2. Harteveld CL, Higgs DR: Alpha-thalassemia. Orphanet J Rare Dis. 2010;5:13

3. Thein SL: The molecular basis of beta-thalassemia. Cold Spring Harb Persepct Med. 2013;1;3(5):a011700

4. Crowley MA, Mollan TL, Abdulmalik OY, et al: A hemoglobin variant associated with neonatal cyanosis and anemia. N Engl J Med. 2011;364:1837-1843

5. Harteveld CL, Voskamp A, Phylipsen M, et al: Nine unknown rearrangements in 16p13.3 and 11p15.4 causing alpha- and beta-thalassaemia characterized by high resolution multiplex ligation-dependent probe amplification. J Med Genet. 2005;42:922-931

6. Hein MS, Oliveira JL, Swanson KC, et al: Large deletions involving the beta globin gene complex: genotype-phenotype correlation of 119 cases. Blood. 2015;126:3374

Performance

Method Description

A hematopathologist evaluates all of the testing performed and a summary interpretive report is added.

PDF Report

No

Day(s) Performed

Monday through Friday

Report Available

3 to 25 days

Performing Laboratory Location

Rochester

Fees and Codes

Fees

- Authorized users can sign in to Test Prices for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.
- Prospective clients should contact their Regional Manager. For assistance, contact Customer Service.

Test Classification

Not Applicable

LOINC® Information

Test ID	Test Order Name	Order LOINC Value
MEV0	Methemoglobin Summary Interp	In Process

Result ID	Test Result Name	Result LOINC Value
608089	Methemoglobin Summary Interp	59465-5
608114	Reviewed By	18771-6