

Overview

Useful For

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

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, Blood:

- 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, Blood.

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 & 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, Blood.

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. Hartevelde CL, Higgs DR. Alpha-thalassemia. Orphanet J Rare Dis. 2010;5:13
3. Thein SL. The molecular basis of beta-thalassemia. Cold Spring Harb Perspect 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(19):1837-1843
5. Hartevelde 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 & 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 account representative. 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 |