MAYO CLINIC LABORATORIES

Test Definition: MEV0

Methemoglobin Summary Interpretation

Overview

Useful For

Incorporating and summarizing subsequent results into an overall interpretation for the MEV1 / Methemoglobinemia Evaluation, Blood

Testing Algorithm

When 1 or more molecular tests are added to the MEV1 / Methemoglobinemia Evaluation, Blood, then this test is also added as consultative interpretation that summarizes the testing performed as well as any pertinent clinical information. This summary is in addition to interpretations that may be provided for each component. This will be provided after additional testing is complete in order to incorporate subsequent results into an overall evaluation.

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 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 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 ed. 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(19):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 results from the testing performed, and a summary interpretation is provided.

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	59466-3

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