

Patient ID SA00143929	Patient Name TESTINGRNA, IL28Q ABNORMAL	Birth Date 1981-06-02	Gender F	Age 39
Order Number SA00143929	Client Order Number SA00143929	Ordering Physician CLIENT, CLIENT	Report Notes	
Account Information C7028846 DLMP Rochester		Collected 05 Apr 2021 00:00		

Results

Analyte	Result	Performing Site
IL28B Genotype	T/T	MCR
IL28B Phenotype	 Decreased sustained virologic response	MCR

Interpretation

MCR

This patient has a genotype that has been associated with a poorer viral response in HCV genotype 1-infected individuals treated with combined pegylated-interferon and ribavirin therapy as compared to CC genotypes. Individuals with the CC genotype, which is not the situation for this patient, have approximately a 2- to 3-fold greater rate of sustained virologic response (SVR) in HCV genotype 1-infected individuals treated with combined pegylated interferon and ribavirin therapy as compared to either the CT or TT genotypes. Similar SVR have been observed across various racial groups including European Americans, African Americans, and Hispanics. IL28B genotype is only one of many factors that can influence response related to pegylated interferon/ribavirin combination therapy in HCV genotype 1 infection and should be interpreted in the context of other clinical factors.

Method

MCR

Genotyping is performed using a PCR-based 5'-nuclease assay. Fluorescently labeled detection probes anneal to the target DNA. PCR is used to amplify the segment of DNA that contains the polymorphism. If the detection probe is an exact match to the target DNA, the 5'-nuclease polymerase degrades the probe, the reporter dye is released from the effects of the quencher dye, and a fluorescent signal is detected. Genotypes are assigned based on the allele-specific fluorescent signals that are detected. (TaqMan(r) SNP Genotyping Assays User Guide, Applied Biosystems)

can influence response rates to pegylated-interferon and ribavirin combination therapy.

CAUTIONS:

Samples may contain donor DNA if obtained from patients who have recently received non-leukoreduced blood transfusions or allogeneic hematopoietic stem cell transplantation. Results from samples obtained under these circumstances may not accurately reflect the recipient's genotype. For individuals who have received blood transfusions, the genotype usually reverts to that of the recipient within 6 weeks. For individuals who have received allogeneic hematopoietic stem cell transplantation, a pre-transplant DNA specimen is recommended for testing.

Disclaimer

MCR

Targeted variant analysis is performed for the IL28B-related rs12979860 (c.-3180G>A). Note that IL28B is now known as IFNL3. This test will not detect other IL28B (IFNL3) variants. Absence of this variant does not rule out the possibility that a patient has that or another variation that can impact the response to treatment of a hepatitis C viral infection.

For liver transplant patients, the IL28B genotype of the recipient and the donor are independent predictors of sustained virologic response with combined pegylated-interferon and ribavirin therapy.

Reviewed by

MCR

Ann Marie Moyer, M.D., Ph.D.

Received: 07 Apr 2021 09:16

Reported: 07 Apr 2021 16:09

Performing Site Legend

Code	Laboratory	Address	Lab Director	CLIA Certificate
MCR	Mayo Clinic Laboratories - Rochester Main Campus	200 First Street SW, Rochester, MN 55905	William G. Morice M.D. Ph.D	24D0404292



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Test
Environment
PGX Template

Laboratory Notes

- 1 This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

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