Reliance Life Sciences

Reliance Life Sciences Pvt. Ltd.,
Dhirubhai Ambani Life Sciences Centre
R 282, TTC Area of MIDC,
Thane Belapur Road,
Rabale, Navi Mumbai - 400 701.

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Test Report

Name of patient	: Mr. RAKESH RAUSHAN .		**Pt. No.**: 156412
Age	: 37 Years		**Sex**: Male
Referred by	: Dr. HARISH VERMA		**Collection center**: POPUL
Date of Collection	: 30/11/2008 10:36:00	**Date of Receipt**: 01/12/2008 13:29:52	**Date of Reporting**: 03/12/2008 13:03:23

Name of Test	: HCV Quantitative RT - PCR
Specimen	: Whole Blood

Test Results

Test Description	Results
HCV Quantitative RT - PCR	48,700

Test Report

HCV Quantitative RT - PCR 48,700 viral copies/ml.
(Forty eight thousand seven hundred viral copies per ml)

Interpretation

HCV induces chronic hepatitis in 60-80%of infected individuals,which may further evolve towards cirrhosis in 20-30%,and may lead to Hepatocellular Cellular Carcinoma.HCV RNA is detectable in patients with chronic or acute hepatitis with/without liver cirrhosis. The HCV Quantitative RT-PCR test is used to detect HCV viral load per se,even prior to immunological sero-conversion,and fluctuation of viremia in antibody-positive chronic patients undergoing therapy.The quantitative HCV RNA test is a highly sensitive and specific test,and provides an indication of viral replication,thereby serves as a valuable tool to guide initiation of therapy,drug regimen and response to therapy.The quantitative HCV RT-PCR test at Reliance Life Sciences,amplifies the 5 'UTR region in serial dilutions of the sample,to get an estimate of viral load.The test detects HCV RNA with a lower limit of resolution of 100 copies per reaction. The specificity of the test is 97-99%.The quantitative HCV PCR test, similar to other PCR tests,is at best a semi-quantitative assay,due to the end point plateau effect of the PCR assay.For accurate quantitation,Real Time PCR is recommended.Improper specimen collection,handling,storage and transportation may result in a false negative result.

Reference:

1)Fabrizi F,Lunghi G,Aucella F,et al.2005.Novel assay using total hepatitis C virus (HCV)core antigen quantification for diagnosis of HCV infection in dialysis patients.J Clin Microbiol.43:414-420.
2)Trimoulet P,de Ledinghen V,Foucher J,et al.2004.Predictive value of early HCV RNA quantitation for sustained response in nonresponders receiving daily interferon and ribavirin therapy.J Med Virol.72:46-51.
3)Hofgartner WT,Kant JA,Weck KE,et al.2000.Hepatitis C virus quantitation:optimization of strategies for detecting low-level viremia.J Clin Microbiol.38:888-891.

End of Report

Dr. Dhananjaya Saranath
Ph.D.

Dr Rajesh M. Korde
M.D. (Pathology)

7C53463
Duplicate Report

LAP No. 7194405
CAP Accredited Laboratory

Regn. No. T0396
NABL Accredited Laboratory

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Test Report

Name of patient	: Mr. RAKESH KUMAR		Pt. No.: 182942
Age	: 38 Years		Sex: Male
Referred by	: Dr.HARISH VERMA		Collection center: POPUL
Date of Collection	: 17/06/2009 05:00:00	Date of Receipt: 19/06/2009 13:33:46	Date of Reporting: 22/06/2009 18:35:43

Name of Test	: HCV Quantitative Real Time - PCR
Specimen	: Blood

Test Results

Test Description	Result (viral copies / ml)
HCV Quantitative Real Time - PCR	Less than detectable limit (<100)

Test Report

HCV Quantitative Real Time - PCR : Less than detectable limit (<100) viral copies/ml.

Interpretation

HCV induces chronic hepatitis in 60-80% of infected individuals, which may further evolve towards cirrhosis in 20-30%, and may lead to Hepatocellular Cellular Carcinoma. HCV RNA is detectable in patients with chronic or acute hepatitis with/without liver cirrhosis. HCV Quantitative Real Time PCR assay is used to detect HCV viral load per se, even prior to immunological sero-conversion, and fluctuation of viremia in antibody-positive chronic patients undergoing therapy. Viral load measurements provide an indication of viral replication, and thereby serve as a valuable tool to guide initiation of therapy, therapy regimen and response to treatment. The method of choice for absolute quantitation of HCV particles, is Real Time PCR assay using flourescein Taqman probe a gold standard for HCV quantitation. The observed standard curve shown in the figure is plotted using serially defined copy numbers of HCV particles, cloned in a plasmid. Linearity of the standard curve validates the assay, as well as indicates the quality of the assay. Real Time PCR measures amplification in the exponential phase of the reaction, avoiding the errors introduced by the plateau effect in the RT-PCR quantitation assays. The specificity of the assay is 100%, and the sensitivity of detection is 1-2 viral copies per reaction, equivalent to 100 viral copies per ml of plasma. The Real Time PCR assay is unique in its capacity of detection of two fold changes in the viral load. It is used for initial quantitation of viral load, and serial samples from a patient will enable assessment of efficacy of treatment. Improper specimen collection, handling, storage and transportation may result in a false negative result.

Reference :
1) Martell M, Gomez J, Guardia J, et al. 1999. High-throughput Real-Time Reverse Transcription-PCR quantitation of Hepatitis C Virus RNA. J.Clin Microbiol. 2: 327- 332.
2) Yang JH, Lai JP, Douglas SD, et al. 2002. Real-time RT-PCR for quantitation of hepatitis C virus RNA. J Virol Methods. 102: 119-128.

End of Report

Dr. Dhananjaya Saranath
Ph.D.

Dr Rajesh M. Korde
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7C85229

Duplicate Report

LAP No. T-1485
CAP Accredited Laboratory