

University of Warwick Science Park, Venture Centre, Sir William Lyons Road, Coventry CV4 7EZ Website: www.micropathology.com E-mail: info@micropathology.com

The Interpretation of Diagnostic Blood tests for Hepatitis C Virus (HCV)

HCV Ab - Hepatitis C antibody - anti-HCV

- Presence provides evidence of exposure and an immune response to HCV but not of current infection
- Usually takes from 6 weeks to 3 months but may take up to six months to develop HCV antibody from time of infection
- Can be DETECTED in both those who have cleared infection and in HCV carriers. It is not known whether the antibody persists in the long term in those that have cleared the infection

HCV RIBA - Recombinant immunoblot assay

- Confirms the presence of discrete antibodies to HCV
- If negative following on a positive EIA , this would indicate that the first HCV Ab test was a false positive
- Like the HCV Ab test only provides evidence of exposure and an antibody response

HCV Ag - Hepatitis C Antigen

• Usually tested in a combination assay with HCV Ab

HCV RNA - Hepatitis C Virus RNA

- Presence in blood indicates active viral replication and therefore active infection
- May be DETECTABLE within 1-3 weeks after exposure
- HCV RNA levels (viral load or quantitative HCV RNA) in the blood are used both to predict and monitor responses to anti-viral treatment

HCV genotype and subtypes

- Genotypes 1-6 are the most common but there are 11 known genotypes with many subtypes
- Different genotypes respond differently to anti-viral treatment
- Used to determine which patients are more likely to respond to anti-viral treatment and the appropriate duration of that treatment.