tracked HCV RNA dynamics allowing clinical monitoring of disease progression and antiviral therapy, however, in samples with HCV RNA levels above 50.000 IU/ml only. Although HCV core antigen testing can be used as a cheaper and attractive alternative in several indications traditionally reserved for NAT, current versions of HCV antigen test do not allow complete replacement of molecular methods in management of hepatitis C.

A21
Virological Analysis of Chronically Infected HBeAg Positive HBV Patients Treated with a Combination of Pegylated Interferon alfa-2B and Lamivudine

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Background: Hepatitis B virus (HBV) genotypes show differences in geographic and ethnic distribution.
Objectives: To investigate the virological parameters of combination therapy (pegylated interferon and Lamivudine) compared to monotherapy with pegylated interferon (Peg-IFN) and to analyze whether there was a HBV genotype dependent difference in treatment response.
Study design: In an international multicenter study we investigated a group of 265 HBeAg-positive CHB patients who were referred to liver units for antiviral therapy. All had detectable HBV DNA ($>10^3$ gEq/ml) and transaminases above 2x ULN.
Results: Mean log HBV DNA (n = 222) was 9.05 for genotype A, 8.52 for B, 8.57 for C and 9.33 for D. HBV DNA level was significantly higher in D than in B and C ($p < 0.003$). Mean ALT level as fraction of ULN was 4.2 for genotype A, 4.3 for B, 3.7 for C, and 4.9 for D (not significant). Virological response, determined by HBeAg seroconversion, to combination therapy was higher at end of treatment (44% at week 52) compared to Peg-IFN alone (29%; $p = 0.01$), although sustained virological response rates were similar in both groups at end of follow-up (week 78; 36% versus 35%). This response rate at end of follow-up was genotype dependent, with genotype A having the highest response rate (47%) and genotype D the lowest (25%). Lamivudine resistance was detected in 14 patients receiving the antiviral drug (10.7%) at end of treatment (week 52), equally distributed among the genotypes in the study population. HBV DNA was measured every 4 weeks, enabling to predict virological factors for the response rate to treatment and/or the emergence of resistant variants.

A22
Occurrence of Hepatitis B Virus (HBV) Reactivation Following Kidney Transplantation

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Background: Recent studies have suggested that the reappearance of HBsAg and the loss of anti-HBs in transplant recipients and chemotherapy-treated patients are not uncommon events.
Case report: HBsAg reappearance was observed in a 74-year-old male who underwent kidney transplantation in 1988. HBV serology performed at the time of transplantation was consistent with resolved HBV infection (anti-HBs >100 IU/ml). Posttransplant low level immunosuppression consisted of cyclosporin A and steroids. Laboratory studies during follow-up did not reveal abnormalities of serum aminotransferase activity. Tests for HBV serologic markers were performed only sporadically and the results corresponded to the previous ones with anti-HBs titers >100 IU/ml. The last negative HBsAg serology was performed in June 2000. In June 2003, the patient was admitted to the hospital because of symptoms of cardiologic failure. Serologic markers for HBV infection revealed loss of anti-HBs, appearance of HBs-Ag, positive hepatitis e antigen (HBeAg), and positive HBV DNA by hybridization.
Discussion: Reappearance of HBV infection may be attributed to reactivation of a latent infection, or to a new HBV infection. Our data suggest that the prior HBV infection may have been reactivated after a period of over 12 years. Changes in the therapy regime in 2002 because of side effects are a possible reason for this, although immunosuppression was only on a low level over the whole time. Natural immunity to HBV may not protect against reactivation in patients with a suppressed immune system. Therefore periodic follow-up of HBV serology for early diagnosis is highly recommended in transplant recipients.

A23
Detection and Differentiation of Human Parvovirus B19 Variants by Commercial Quantitative Real-Time PCR Tests

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Background: Human parvovirus B19 replicates in erythrocyte precursors of bone marrow, causing high-titer viremia during the acute phase of infection. Screening of plasma pools for B19 is necessary to improve the safety of products used to treat immunocompromised individuals, pregnant women and patients with various hematologic disorders. Two commercial quantitative PCR assays are available for such screening. However, two additional genotypes of the B19 virus have been recently found, diverging in DNA sequence by $>10\%$ from the original virus and from each other.
Objectives: Suitability of two commercial LightCycler-based B19-specific quantitative PCR tests, from Roche and Artus, was examined for detection and differentiation of parvovirus B19 genotypes 1, 2 and 3.
Study design: The PCR tests were validated using different B19 genotype sequences in human tissue and in carefully characterized plasmids containing cloned B19 genomes. We furthermore assessed the prevalence of the three B19-virus genotypes in 160 blood donors, by screening pooled plasma samples.
Results: We found the Roche B19 qPCR kit to be suitable for detection and quantification of B19 genotype 1. One isolate of