Drug interactions won't exclude HCV transplant or HIV co-infected patients from treatment

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New data from a number of clinical trials presented for the first time at the International Liver Congress 2012 provides hope for previously difficult to treat hepatitis C (HCV) patient populations.

In the first multicentric study of the efficacy and safety of the protease inhibitors (PI) Boceprevir or Telaprevir in patients with severe HCV genotype 1 (GT1) recurrence after liver transplantation(1), results show that 57% of patients achieve undetectable hepatitis C viral loads 24 weeks after treatment (SVR24) with pegylated Interferon-alfa-2b (PegIFN-α-2b), ribavirin (RBV) and either Boceprevir or Telaprevir. Interactions between immunosuppressants and PIs were easily controlled.

Further new data shows that, in HCV GT1 and HIV co-infected patients, the addition of Boceprevir to PegIFN-α-2b and RBV results in higher rates of undetectable HCV RNA levels compared to treatment with only PegIFN-α-2b and RBV alone.(2) At the end of treatment (week 48), 63.9% of patients receiving Boceprevir, PegIFN-α-2b and RBV had undetectable HCV RNA, compared to 29.4% in the control arm. The study found the safety and tolerability profile of Boceprevir, PegIFN-α-2b and RBV was consistent with that observed in HCV-monoinfected patients.

The combination of these findings provides new hope for various

difficult to treat hepatitis C populations. Professor Mark Thursz, EASL's Secretary General commented on the exciting new data: "Patients with HIV co-infection and patients who have been transplanted for HCV infection often have more aggressive disease and have been harder to treat. Worries about drug-drug interactions have caused concern about the use of protease inhibitors in these groups. The new trial data shows that the benefits of direct anti-virals can now be experienced by a wider group of patient populations."

In a study of chronic HCV GT1 patients previously unresponsive to treatment with PegIFN and RBV alone , new data shows TMC435 - an oral, once-daily, investigational HCV NS3/4A protease inhibitor - combined with PegIFN-alfa-2a and RBV achieves significantly higher SVR24 rates compared with placebo.(3) In the hardest to treat group of prior null-responders with cirrhosis, TMC435, PegIFN-alfa-2a and RBV treatment shows 61-80% SVR24 compared to 23% with placebo.

In other exciting data presented at the congress, the authors of a study on PSI-7977, a uridine nucleotide analog, propose that it may signal an end to response guided therapy in HCV GT1 patients.(4) Response-guided therapy is a paradigm for treating chronic HCV infections in which treatment decisions are based on how rapidly HCV responds to treatment.(5) With response-guided therapy, patients who rapidly clear virus from their bloodstream are eligible to receive a shorter duration of therapy, while slower responders receive standard or extended durations of therapy.(5)

In earlier studies, PSI-7977 has been associated with greater than 90% SVR (sustained virological response undetectable HCV RNA level 24 weeks after treatment) in HCV GT1, GT2, or GT3 patients, independent of predictors of poor responsiveness to interferon. In new data presented at the congress, the study authors show HCV GT1, GT4, or GT6 patients treated with PSI-7977 and PEG/RBV achieved 97% RVR (rapid

virological response – undetectable HCV RNA level after four weeks of treatment), with no viral breakthrough or relapse observed to date in subjects completing at least 10 weeks of PSI-7977.

More information: References:

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2. Mallolas J, BOCEPREVIR PLUS PEGINTERFERON/RIBAVIRIN FOR THE TREATMENT OF HCV/HIV CO-INFECTED PATIENTS: END OF TREATMENT (WEEK 48) INTERIM RESULTS. Abstract presented at the International Liver Congress 2012.

3. Zeuzem S, et al, TMC435 IN HCV GENOTYPE 1 PATIENTS WHO HAVE FAILED PREVIOUS PEGYLATED INTERFERON/RIBAVIRIN TREATMENT: FINAL SVR24 RESULTS OF THE ASPIRE TRIAL. Abstract presented at the International Liver Congress 2012.

4. Kowdley KV, ATOMIC: 97% RVR FOR PSI-7977 + PEG/RBV X 12 WEEK REGIMEN IN HCV GT1: AN END TO RESPONSE-GUIDED THERAPY?. Abstract presented at the International Liver Congress 2012.

5. Kwo PY, Response-guided Therapy for HCV. Gastroenterol Hepatol (N Y). 2011 January; 7(1): 43-45.

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