

Limited Sustained Response and Lack of HBsAg Decline after Stopping Long-Term Nucleos(t)ide Analogue Therapy in Hbeag Negative Patients with Chronic Hepatitis B: Results of a Prospective, Randomized, Open-Label Phase IV Trial

Dr. Kin Seng Liem^{1,2}, Dr. Scott K. Fung³, Dr. David KH Wong¹, Colina K. Yim¹, Ms. Seham Noureldin¹, Dr. Feng Fei Huang¹, Hemant A. Shah¹, Dr. Jordan J. Feld^{1,4}, Dr. Bettina E. Hansen^{1,5,6} and Prof. Harry L. A. Janssen¹, (1)Toronto Centre for Liver Disease, University Health Network, (2)Dept. of Gastroenterology & Hepatology, Erasmus University Medical Center Rotterdam, (3)University of Toronto, Toronto, on, Canada, (4)McLaughlin-Rotman Centre for Global Health, (5)Institute of Health Policy, Management and Evaluation, University of Toronto, (6)Department of Gastroenterology & Hepatology, Erasmus Medical Centre Rotterdam

Abstract Text

Background: Chronic hepatitis B (CHB) patients often receive life-long therapy with nucleos(t)ide analogues (NA). In this prospective randomized controlled trial we assessed the proportion of patients with sustained response after stopping long-term entecavir (ETV) or tenofovir (TDF) therapy.

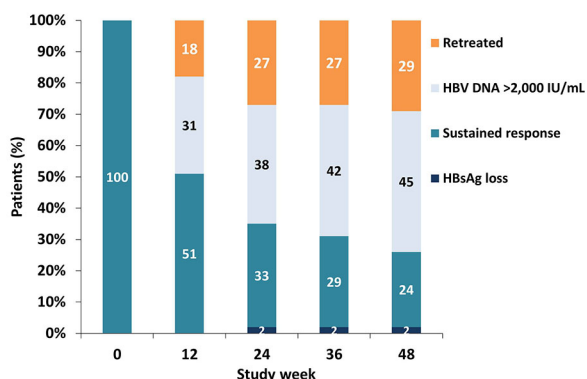
Methods: Patients at the Toronto Centre for Liver Disease were included if they had received ETV/TDF therapy for ≥ 1 year and achieved virologic suppression (defined as HBeAg seroconversion combined with undetectable HBV DNA ≥ 12 months in HBeAg positive patients, or undetectable HBV DNA ≥ 36 months for start of therapy HBeAg negative patients). Patients were then randomized 2:1 to stop or continue NA therapy for 72 weeks. Patients were retreated in case of persistent HBV DNA $>20,000$ IU/mL, HBeAg seroreversion or HBV DNA $>2,000$ with ALT >5 xULN (clinical relapse). Sustained response (HBeAg-negative, HBV DNA $<2,000$ IU/mL and normal ALT) at 48 weeks of follow-up was evaluated in both groups.

Results: Of 67 enrolled patients (60% male, 97% Asian), 45 (67%) patients were randomized to stop and 22 (33%) to continue NA therapy. 37/67 (55%) patients lost HBeAg on NA therapy. At randomization the mean duration of NA therapy was 8 (4) years and HBsAg level was 3.0 (0.7) log IU/mL. Sustained response was observed in 11/45 (24%) stop vs. 22/22 (100%) continue patients at week 48 (see Figure). Within the stop group 24/45 (53%) patients continued to have a normal ALT and HBeAg negative status. Fourteen (21%) patients developed ALT >10 x ULN and another 7 (10%) had ALT >5 x ULN.

HBsAg loss occurred in two patients (1 per group). Mean HBsAg decline from randomization to week 48 was 0.1 (0.0-0.3) vs. 0.0 (0.0-0.1) log IU/mL in stop vs. continue patients ($p=0.50$) and was not associated with peak ALT values after stopping ($p>0.05$). Among patients who stopped, 13/45 (29%) required retreatment by week 48 (6 had virologic relapse $>20,000$ IU/mL and 7 had clinical relapse, of which 1 had HBeAg seroreversion). Median (range) time to retreatment was 12 (10-30) weeks. No patient experienced liver decompensation or died.

Conclusion: Forty-eight weeks after stopping NA therapy, only 24% of patients had a sustained response, while 74% had relapse and 2% had HBsAg loss. HBsAg levels in the stop group declined marginally and were not different from the NA continuation group. The findings of this prospective study in mainly Asian patients demonstrate no additional benefit of stopping NA therapy. Week 72 results will be presented at the Meeting.

Sustained response, retreatment and HBsAg loss in stop patients (n=45)



Disclosures

Kin Seng Liem – Merck: Speaking and Teaching

Scott K. Fung – Gilead Sciences: Advisory Committee or Review Panel; Gilead Sciences: Speaking and Teaching; Gilead Sciences: Grant/Research Support

David KH Wong – Abbvie: Speaking and Teaching; Merck: Speaking and Teaching; Gilead: Speaking and Teaching

Colina K. Yim – Gilead Canada: Speaking and Teaching

Hemant A. Shah – Abbvie: Advisory Committee or Review Panel; Gilead: Advisory Committee or Review Panel; Merck: Advisory Committee or Review Panel; Intercept: Advisory Committee or Review Panel; Lupin: Advisory Committee or Review Panel

Bettina E. Hansen – Cymabay: Grant/Research Support; Cymabay: Consulting; Intercept: Grant/Research Support; Intercept: Consulting; Janssen Parma: Consulting; Albiero: Grant/Research Support

Harry L. A. Janssen – Abbvie: Consulting; Abbvie: Grant/Research Support; Bristol Myers Squibb: Consulting; Bristol Myers Squibb: Grant/Research Support; Benitec: Consulting; Gilead Sciences: Consulting; Gilead Sciences: Grant/Research Support; Janssen Pharm: Consulting; Janssen Pharm: Grant/Research Support; Medimmune: Consulting; Medimmune: Grant/Research Sup

Disclosure information not available at the time of publication: Seham Nouredin, Feng Fei Huang, Jordan J. Feld