Background and Aims: Entecavir and tenofovir are currently recommended as the first line agents in the treatment of chronic hepatitis B (CHB); however a direct comparison of efficacy has not been conducted yet.

Methods: NA-naïve patients with CHB who received tenofovir or entecavir monotherapy for at least 6 months were included in the study. Biochemical and virological tests were obtained at baseline and 3-month intervals in the first year and every 6 months thereafter. The primary outcome measure for efficacy was complete virological response (CVR), defined as HBV-DNA <20 IU/ml.

Results: 288 patients (206 male, mean age 43±12, 87 HBeAg-positive, 73 cirrhotic) were included in the study. 187 patients received entecavir and 107 patients received tenofovir monotherapy. Mean duration of entecavir and tenofovir monotherapy was 34±16 and 27±13 months, respectively. In HBeAg-negative group, cumulative CVR rates in patients receiving entecavir and tenofovir were 48% vs 54% at 6th month, 83% vs 82% at 12th month and 94% vs. 88% at 24th month, 98% vs. 94% at 36th month, respectively (Figure 1a, p=0.83). In HBeAg-positive group, cumulative CVR rates in patients receiving entecavir and tenofovir were 8.7% vs 14.6% at 6th month, 28.7% vs 37.9% at 12th month and 55% vs. 58% at 24th month, 73% vs. 72% at 36th month, respectively (Figure 1b, p=0.58). None of the patients experienced any significant adverse events. 1 patient developed entecavir resistance (L180M, M204V, S202G) that required a switch to tenofovir.

Conclusions: Cumulative CVR rates during the follow-up shows that entecavir and tenofovir has a comparable and potent efficacy in HBeAg-negative and positive CHB.

Figure 1.