**Introduction**

- Entecavir (ETV) provides both potent viral suppression and a high genetic barrier to resistance.1-3
- Genetic barrier is defined as the number of mutations required to produce a decrease in susceptibility to the antiviral drug.3

- Limitations
  - Study endpoints were not originally designed to detect genotypic resistance, and results would not be statistically informative if too few patients developed resistance.

**Methods**

**Resistant Analysis**

- Nucleoside-naïve patients: Patients with chronic hepatitis B (CHB) who were not previously treated with nucleoside analogues, including lamivudine (LVD).
- Lamivudine-refractory patients: Patients with chronic hepatitis B (CHB) who were previously treated with LVD.

**Results**

**Nucleoside-Naïve**

- In nucleoside-naïve patients, ETV resistance (ETVr) was rare through 5 years.1
- The 6 year cumulative probability of genotypic resistance is 57%.

**Lamivudine-Refractory**

- Over 6 years experience, only 3 of 663 patients were identified with ETVr.
- 94% of patients at Year 6 (N=99) had HBV DNA <300 c/mL.

**Discussion**

- Results highlight the robust efficacy and safety profile of ETV over multiple years.

**Limitations**

- Early patients, the rollover results to treatment with higher ETV dose in Study 901.
- Study endpoints were not originally designed to detect genotypic resistance.

**Summary of Results**

- Resistance is rare through 6 years.
- ± 4% cumulative probability of genotypic resistance.

**Conclusion**

- ETV has high efficacy and high genetic barrier to resistance in nucleoside-naïve patients (Figure 4).
- In lamivudine-refractory patients, ETV potency and genetic barrier are reduced and an incremental increase in resistance is demonstrated over time (Figure 5).
- Favorable prognostic subgroups can be identified early on to improve treatment.

**References**


