Hepatitis B Virus (HBV)-Related Outcomes in Patients With Baseline HBV Infection in the KEYNOTE-966 Study of Pembrolizumab Plus Gemcitabine and Cisplatin for Advanced Bilary Tract Cancer

Introduction
The randomized, double-blind, placebo-controlled phase 3 KEYNOTE-966 study showed that adding pembrolizumab to gemcitabine and cisplatin (gem/cis) significantly improved overall survival compared with gem/cis alone as front-line therapy for advanced biliary tract cancer (BTC).

HBV virus (HBV) has been shown to integrate at various locations in nonparenchymal cell cholangiocarcinoma genomes. A previous study showed that HBV infection is a known risk factor for BTC.

Pembrolizumab-monotherapy has shown limited impact on underlying HBV in patients with advanced hepatocellular carcinoma.

The impact of pembrolizumab plus chemotherapy on underlying HBV in patients with cancer is unknown.

Objective
Determine the impact of pembrolizumab plus chemotherapy on underlying HBV in participants enrolled in the KEYNOTE-966 study.

Methods


Figure 1. KEYNOTE-966 Study Design (ClinicalTrials.gov identifier, NCT04963634)

Figure 2. Time Course of HBV DNA and ALT Levels, Duration of Treatment, and Initiation of New Antiviral Therapy in Participants With Clinically Resolved HBV at Baseline Who Experienced HBV Reactivation During the Study

Figure 3. Time Course of HBV DNA and ALT Levels, Duration of Treatment, and Initiation of New Antiviral Therapy in Patients With Clinically Resolved HBV at Baseline Who Experienced HBV Reactivation During the Study

Patients included in this analysis were enrolled in the KEYNOTE-966 study and had baseline HBV DNA >20 IU/mL. Participants were treated with pembrolizumab (Pemb) or placebo (Plc) plus gem/cis chemotherapy. HBV DNA quantification was conducted by polymerase chain reaction with an upper limit of quantification of 107 IU/mL. HBV reactivation was defined as an increase in HBV DNA by ≥2 log10 IU/mL with or without ALT elevations. HBV-related clinical outcomes were assessed by blinded independent central review (BICR).

Table 2. Definitions of HBV Reactivation and HBV-Associated Hepatitis

Table 4. Participant Characteristics and Study Drug Exposure in Those With HBV Infection at Baseline

Table 5. Summary of Antiviral Therapy in Patients With Baseline HBV Infection Who Received Antiviral Medication During the Study

Table 6. HBV-Related Outcomes in Evaluable Participants With HBV Infection at Baseline

Table 3. Participants With HBV Infection at Baseline

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Results

Conclusions

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References

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