**PO-04**  
**Antiviral efficacy of adefovir dipivoxil in lamivudine-resistant chronic hepatitis B: the optimal duration of lamivudine overlap**

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**Backgrounds:** The antiviral response of adefovir dipivoxil (ADV), the predictors of its response, and optimal duration of lamivudine (LAM) overlap were studied in patients with LAM-resistant chronic hepatitis B (CHB).

**Methods:** Retrospective analysis on the antiviral efficacy of ADV was performed in the 175 LAM-resistant CHB patients who were treated with ADV for more than 12 months either as the switch therapy from LAM, or as the add-on therapy with LAM. The mean duration of ADV treatment was 34 months.

**Results:** The subjects showed mean age of 48.1 years, 72.6% of male, 37.1% of compensated cirrhosis, 75.4% of HBsAg positivity, mean ALT level of 258, and mean pretreatment HBV DNA level of 6.33 log10 copies/mL. The overall virologic response rate (VR) at the last follow-up was 57.1%, and virologic breakthrough rate (BT) was 12.6%, and HBsAg loss rate was 29.1% among the 175 patients, in whom 45 patients (25.7%) were ADV switch group and 130 patients (74.3%) were ADV add-on group. The add-on group showed significantly higher VR (61.5%) and lower BT (4.6%) at the last follow-up than those of switch group (42.2% and 35.6%, respectively). The undetectable HBV DNA level at 12 months of treatment was a significant predictor of VR. As a subgroup analysis, the add-on group was divided into 2 subgroup, LAM-discontinuation group and LAM-continuation group at 12 months after achieving VR. The LAM-discontinuation group showed similar VR (93.3%) and BR(0%) to the LAM-continuation group (85.7% and 0%, respectively).

**Conclusions:** LAM should be added to ADV therapy for the LAM-resistant CHB patients to get a better VR. However, LAM may be discontinued when LAM and ADV combination was administered for 12 months after achieving VR. Further studies are warranted to investigate the optimal duration of ADV and LAM combination for the LAM-resistant CHB.

**Keyword:** Adefovir, Lamivudine resistance, Chronic hepatitis B, Combination therapy

**PO-05**  
**Antiviral efficacy of entecavir monotherapy in adefovir-resistant chronic hepatitis B: focus on genotypic mutation patterns**

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**Background:** Despite of limited evidence, entecavir (ETV) has been thought as an effective agent to adefovir (ADV) resistance. However, its antiviral efficacy and safety, especially in terms of ADV signature mutation types, have not been elucidated so far. An antiviral effect of ETV to multidrug-resistant mutation of A181V/T remains unclear.

**Methods:** We assessed consecutive 57 patients on ETV monotherapy due to sequential lamivudine (LAM)- and ADV-resistant CHB. For sub-analysis, an antiviral efficacy was evaluated according to ADV resistant mutation patterns as follows; A181V/T (n=33), N236T (n=9) and A181V/T+N236T (n=15).

**Results:** The median baseline viral load was 4.94 log10 IU/mL (range 1.78-8.23) and the median duration of follow-up was 22 months (range 6-60). The A181V/T mutation showed a significantly higher reduction of HBV DNA level at 24 weeks (2.24±0.38 log10 copies/mL, p=0.0001), while the drop was significantly greater in the A181V/T+N236T group (2.24±0.61 log10 copies/mL, p=0.0004) at 48 weeks. Four (14%) patients with A181V/T mutation showed virologic breakthrough and there was no significant differences in virologic response among the three subgroups (21% vs. 12% vs. 27%, p=0.749). Serum alanine aminotransferase normalization was higher in

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