

## **IDSA 2015 Abstract**

**Title:** Brincidofovir (BCV) for the Treatment of Adenovirus (AdV) Infection in Patients Receiving Liver Transplantation (LT)

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**Background:** AdV causes significant morbidity and mortality following solid organ transplant, including LT. The rate of AdV infection in LT patients (pts) varies from 3.5 to 38%, with mortality up to 53%. There are no FDA-approved treatments for AdV. BCV, a nucleotide analogue with broad spectrum *in vitro* antiviral activity against double-stranded DNA viruses, is in Phase 3 development for treatment of AdV infection. We present preliminary survival, virologic response, and tolerability data from LT pts treated with BCV for AdV infection.

**Methods:** Pediatric and adult pts who received isolated LT and multi-organ transplantation including liver were identified from studies CMX001-304 [NCT02087306] and CMX001-350 [NCT01143181] (studies of  $\geq 12$  weeks treatment duration); and emergency INDs. Assessments included change from baseline AdV viral load (VL), time to nadir VL, and safety/tolerability.

**Results:** Thirteen LT recipients including 10 multi-organ pts received BCV for AdV infection. The majority (n=10) were pediatric pts with a median age of 21 months (range: 6 months, 13 years), and 9 (69%) were male. Three subjects (all female) were  $\geq 15$  years of age with a median age of 17 years (15, 31 years). Across the 13 pts, median baseline plasma AdV VL was 3.4 log<sub>10</sub> c/mL (undetectable, 10.0 log<sub>10</sub> c/mL). Median change from baseline in VL was -1.3 log<sub>10</sub> c/mL (-8.0, -0.3 log<sub>10</sub> c/mL) and median time to nadir VL was 15 d (4, 96 d). In subjects followed for >28 d (n=10), all were alive at time of evaluation, with median change in AdV VL of -1.1 log<sub>10</sub> c/mL. In subjects (n=3) followed for <28 d, one subject died. In one patient (out of 13 pts), treatment was discontinued due to a BCV-related adverse event (AE) (diarrhea). No BCV-related clinical hepatobiliary AEs were reported, with aminotransferase levels remaining stable or declining during treatment. Median change in ALT was +4 U/L (-507, +106 U/L), AST -1 U/L (-691, +35 U/L), bilirubin -0.05 mg/dL (-15.5, +4.1 mg/dL), and creatinine +0.1 mg/dL (-0.9, +2.5 mg/dL).

**Conclusions:** Preliminary pooled data from several LT patients with AdV infection suggest that treatment with BCV can reduce viral burden and is associated with favorable survival. BCV was tolerated, with no clinical hepatobiliary AEs reported in these LT patients.

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