

**Abstract for 39<sup>th</sup> Annual Meeting of the European Group for Blood and Bone Marrow Transplantation (EBMT)**

**Date:** 7-10 April, 2013, London, UK

**Abstract Submission Deadlines:** 17 December 2012 (Physicians)

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**Preferred Method of Presentation:** Oral

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**Abstract Title:** CMX001 is a Potential Treatment for Adenovirus Infection: Preliminary Antiviral Efficacy Results from an Open-label, Expanded Access Study of CMX001 for the Treatment of Serious or Life-threatening Diseases Caused by Double-stranded DNA Viruses

**Abstract Text (max. 2500 characters, including spaces):**

**Background:** In immunocompromised patients (pts), adenoviruses (AdV) are an important cause of morbidity/mortality. Hematopoietic cell transplant (HCT) pts are at especially high risk; infection associated with viremia is more severe, often disseminated and, once established, often rapidly fatal without treatment (tx). No antiviral drugs are currently approved for AdV infections, which are typically managed by supportive care. A virologic response to tx with intravenous (IV) cidofovir (CDV) has been associated with clinical improvement; failure to achieve a  $\geq 1$  log<sub>10</sub> decrease in viral load (VL) during first 2 weeks is associated with poorer pt outcomes. However, IV CDV use is limited by significant side effects. CMX001 is an orally bioavailable, broad spectrum, lipid acyclic nucleoside phosphonate converted intracellularly into the active antiviral, CDV diphosphate. We describe here preliminary antiviral efficacy data in a subset of 57 AdV-infected pts treated with CMX001 in an open-label, expanded access study (CMX001-350; ClinicalTrials.gov identifier: NCT01143181). **Methods:** Pts received CMX001 twice weekly (BIW), typically 100 mg BIW for adults/adolescents or 2 mg/kg BIW for pediatrics ( $\leq 12$  yrs). AdV VL was measured at baseline (BL), regularly during the tx period and 1- and 4-wks post-tx. **Results:** Most pts were male (61.4%), white (70.2%) and had received a HCT (84.2%). Median (range) age was 17 (0-68) yrs. Median (range) duration of CMX001 tx was 12 (1-64) doses over 7 (1-43) wks. Thirty (30/57, 52.6%) pts survived; 10 (17.5%) died from AdV-associated conditions and 17 (29.8%) from other causes. Overall, AdV-associated mortality was 37.5% (6/16) for pts with disseminated disease, 11.5% (3/26) for localized disease, and 6.7% (1/15) for pts with BL viremia (1/15). Most (43/57) pts had detectable viremia at BL and  $\geq 1$  post-BL assessments and were evaluable for virologic response. Median (range) VL at BL was 4.82 (2.30-9.11) log<sub>10</sub> c/mL. Thirty-four pts (79.1%) had  $\geq 1$  log<sub>10</sub> decrease from BL or to below limit of detection (=100 c/mL) at the end of tx. The median (Q1, Q3) decrease was 1.57 (0.58, 2.64) log<sub>10</sub> c/mL. Pts achieving a  $\geq 1$  log<sub>10</sub> decrease (including in sputum or stool) had overall better outcomes, with 8.6% (3/35) AdV-associated deaths (all within the first 3 weeks of tx) vs 27.3% (6/22) for pts with  $< 1$  log<sub>10</sub> drop. **Conclusions:** CMX001 appears to be a promising therapeutic option for the tx of AdV infections.

**Character Count (not including title, authors, affiliations, or table):** 2460 (including spaces)

## Guidelines for Submission of Abstracts

1. Abstracts may be submitted only via Internet. Abstracts submitted via fax or e-mail will not be accepted.
2. All abstracts must be submitted and presented in English.
3. Abstracts should contain original material neither published nor presented elsewhere prior to 7 April 2013.
4. With internet submission of an abstract, the author(s) transfer(s) all copyright ownership to the European Group for Blood and Marrow Transplantation.
5. Abstracts should be informative, containing objectives, methods, results and a conclusion. Just the promise of further data and discussion is not acceptable.
6. The abstract text may not be longer than 2500 characters, including spaces.
7. Tables, charts and other graphics are permitted and must be in JPG or GIF format, of high resolution and suitable for reproduction in black & white. A separate upload button is provided (max 2 graphics per abstract). No photos may be submitted.
8. Avoid complex mathematical formulae, Greek letters and symbols. For the symbols  $\leq$  or  $\geq$ , type  $\leq$  or  $\geq$  instead. For superscript use caret (^), eg,  $10^6$  instead of  $10^6$ . Instead of 'IFN- $\gamma$ ' use 'IFN-gamma', etc.
9. All abbreviations must be defined the first time they appear in your text (but, do not define in the title). Example: Graft-versus-host disease (GvHD), before being used as an abbreviation only.
10. Authors are requested to select a topic under which they wish their abstract to be reviewed.
11. Authors should indicate their preferred method of presentation
  - Oral Presentation
  - Poster Presentation
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The selection committee reserves the right to decide on the final allocation and presentation method.

12. If an abstract is accepted, the presenting author must register and attend the congress. Acceptance of a paper implies payment of the registration fee by the presenting author.
13. After having submitted your abstract, you will receive a confirmation by e-mail with the following information (please make sure to state your correct email address):
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