Reviewer's report

Title: Effect of Ganciclovir for the Treatment of Severe Cytomegalovirus-Associated Pneumonia in Children without Specific Immunocompromised Status

Version: 1 Date: 13 February 2013

Reviewer: Hans Helmut Niller

Reviewer's report:

There is not much literature on CMV-infections in patients without apparent immune suppression or immune deficiency. Thus, this manuscript gives an interesting perspective and should stimulate further research in this direction.

Major essential revisions:

1. The topics of premature birth and intrauterine infection are completely omitted. Would you please provide data, or at least discuss the topics. If intrauterine infection was involved, how many cases of pneumonia were due to primary infection of the mother during pregnancy, how many due to CMV-recurrence?

2. The nutritional statuses of the examined children, as compared to their age cohorts, are not given and not discussed. Would you please present this data.

2. The rapid test for influenza is of insufficient quality to exclude co-infection with influenza viruses. Would you please re-examine the nucleic acids for influenza virus with RT-PCR, and possibly parainfluenza virus, in addition?

3. Figure 3 should show each individual case in the form of a dot graphic, in addition to the histograms. Figures 1 and 2 would possibly also benefit from such a individual graphic representation.

Minor essential revisions:

1. Besides plasma and tracheal aspirates, did the authors also sample urine for quantitative CMV-PCR?

2. Were anti-CMV-enriched immunoglobulins additionally to GCV used for therapy in some cases?

3. There are numerous spelling mistakes. I labeled them mostly in the accompanying pdf. Please correct.

Discretionary Revisions:

1. Reference 8 in paragraph Patients and case definitions: would you please list the WHO criteria for severe pneumonia within the text?

2. Paragraph Clinical symptoms and laboratory data, middle of page 7: GOT and GPT are named AST and ALT in table 1 which are currently the preferred names.
3. Discussion part, end of page 9: CMV-DNA copy number in plasma might also stem from apoptotic cells carrying or replicating CMV.

4. References: The authors might also cite Siret and David, Arch Pediatr 2002, 9:499-502, for a case of CMV-pneumonia in an immunocompetent infant.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests