Reviewer's report

Title: Frequent detection of Bocavirus DNA in German children with respiratory tract infections

Version: 1 Date: 6 May 2006

Reviewer: Ron A.M. AM Fouchier

Reviewer's report:

General

Manuscript “Frequent detection of Bocavirus DNA in German children with respiratory tract infections” by Benedikt Weissbrich, Florian Neske, Jorg Schubert, Franz Tollmann, Katharina Blath, Kerstin Blessing, and Hans Wolfgang Kreth describes a study on the frequency of Bocavirus infections and the potential clinical relevance of this virus in pediatric patients hospitalized between 2002 and 2005. From the 835 samples tested, 87 samples were positive for Bocavirus, of which 34 (39%) were also positive for other respiratory viruses. The manuscript is well written, and the data are presented clearly.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

None

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. In several positions in the manuscript, the authors use the term “homology” in sequence comparisons. It would be better to use % sequence identity, and to indicate if this is computed based on nucleotide or amino acid sequences.
2. Page 3. Rivers has modified Koch’s postulates to make these better applicable to viral pathogens (Rivers, T. M. J. Bacteriol. 33, 1–12 (1937).
3. On page 5 and 8, the sensitivity of the PCR assay is given as 5 or <10 copies. Please provide only 1 limit of sensitivity.

Discretionary Revisions (which the author can choose to ignore)

1. Page 7 and table 4. With respect to the clinical symptoms associated with Bocavirus infection, it would be useful to compare the clinical data of individuals infected with Bocavirus alone with data for individuals infected with Bocavirus plus a second pathogen. If the clinical data would be comparable, this would provide some evidence for Bocavirus as a causative agent of respiratory tract disease.
2. Because several important respiratory pathogens have not been tested in the study, and because a relatively insensitive detection method was used for the other viruses, the reported rate of co-infections is probably too low. This could be discussed better.
3. It is likely that due to the use of sensitive PCR assays, positive samples may originate from infections prior to or after the peak viremia (and clinical signs). This issue could be discussed.

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests