Reviewer’s report

Title: Clinical development of monoclonal antibody based drugs in HIV and HCV diseases

Version: 2 Date: 2 August 2012

Reviewer: Jeffrey Jacobson

Reviewer’s report:

The paper is an excellent review of the clinical investigation of monoclonal antibody therapeutics against HIV and HCV infection. It is well written and thorough. I have only relatively minor organizational and editing comments.

Page 5, line 3: Vesicular stomatitis virus is VSV, not VZV.

Page 5, last paragraph: It should be clarified that Pavlizumab is an anti-RSV (Respiratory Syncytial Virus) monoclonal antibody.

Page 9: “Immune system-mediated clearance of viruses and infected cells” was described in the previous section, and would be a better title for that section. This section describes immune exhaustion in chronic infection, and its title should reflect that.

Page 11, first full paragraph: The experience with TGN1412 should be specifically described, not just alluded to. Many readers may be unaware of what happened.

Page 11, last paragraph: Clarify “type B” and “LVPs”.

Page 13, second full paragraph: The last sentence - “The study is ongoing, but not recruiting participants.” - is confusing. Perhaps it can be deleted, since earlier the authors state that “KD-247 is under evaluation in clinical trials.”

Page 16, first full paragraph: The first sentence, “CD4 assists the T cell receptor (TCR) with…..” should be reworded for clarity.

Page 18, line 8: Probably the authors intended for the word “weekly” to follow “administered”.

Page 19, line 16: I suggest deleting the word, “which”.

Page 20, line 2: Insert “the” after “in”.

Page 20, line 16: Insert “a” after “is”.

Page 20, lines 17-19. Although, theoretically, targeting host cell antigens should lead to a lower likelihood of developing drug resistance, in fact this has not been the case with ibalizumab, an anti-CD4 antibody. Resistance has developed in monotherapy trials, as mentioned earlier in the paper. This fact should be noted
Page 21, last two paragraphs. The adverse effects, particularly the autoimmune events, that have occurred in clinical trials of anti-CTLA4 and anti-PD1 antibodies should be described.

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.