

ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 6628

Title: Phage display creates innovative applications to combat hepatitis B virus

Reviewer code: 02538313

Science editor: Ma, Ya-Juan

Date sent for review: 2013-10-26 12:28

Date reviewed: 2013-12-22 20:38

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> [Y] Accept
<input type="checkbox"/> [Y] Grade B (Very good)	<input type="checkbox"/> [Y] Grade B: minor language polishing	<input type="checkbox"/> [] Existed	<input type="checkbox"/> [] High priority for publication
<input type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> [] No records	<input type="checkbox"/> [] Rejection
<input type="checkbox"/> Grade D (Fair)	<input type="checkbox"/> Grade D: rejected	BPG Search:	<input type="checkbox"/> [] Minor revision
<input type="checkbox"/> Grade E (Poor)		<input type="checkbox"/> [] Existed	<input type="checkbox"/> [] Major revision
		<input type="checkbox"/> [] No records	

COMMENTS TO AUTHORS

General comments: The authors have provided a comprehensive and excellent review of the literature with regard to various applications of phage display technology and have specifically included literature review on HBV. There are good numbers of references from the beginning days of using phage technology up to the past several years. And of course, the authors have very well used their long term experience using this technique. The reference 169 is especially very interesting. And the tables are very well prepared. In order to prevent ambiguity, it is especially valuable that the authors have summarized each section before the beginning of a new section on application of phage display. There are also sections on drawbacks of the use of phage display for certain applications. Specific comments/questions: 1- There were minor spelling, grammatical corrections that are highlighted in gray. Please note and see if the changed words still convey your understanding of the literature. 2- The authors have noted the importance of HIV-HBV coinfection in the abstract and introduction. One may wonder if there is any unpublished introductory work by the authors or other authors in this area that worth mentioning in the conclusion as well. 3-Under introduction: "The virion is enveloped by a lipid bilayer derived from the liver cell membranes". Although this sentence is generally right, I have usually seen it in references as "The virion is enveloped by a lipid bilayer derived from host cell membranes". (Volker Bruss. Envelopment of the hepatitis B virus nucleocapsid. Virus Research, 2004, 106:199-209). 4- Phage display technique has been experimentally used for design of HBV vaccine in late 1990s and early 2000s; the authors have cited these articles and mentioned a few in late 2000s: a) The main question that arises is that why a vaccine for HBV using phage display has not been worked on more vigorously? In what ways the use of Phage display techniques for vaccine design can be improved? b) What are the drawbacks of using

this methodology in vaccine design? The authors have pointed to induction of immune response against phage antigens too and pointed out on ways to induce specific immunity against HBsAg. How applicable these methods are in practice? Although, it has to be acknowledged that items discussed as positive points for justification of the use of phages for vaccine design on pages 12 and 13 are important to be considered. In addition, the paragraph on the use of VLPs under conclusion is very well written. 5- Although it is admirable that the authors have spent time to describe each section of the article from the early work performed. As a reader, I found some history and introductory sentences such as those provided on page 13 and 14 to be repetitious. Therefore, I wonder if the editor finds it necessary to be included in the article. For example: "As a recap for the development of HBV diagnostic assays from the very beginning of the discovery of the Australia antigen, a typical Ouchterlony agar gel The powerful nucleotide sequencing method developed by Sanger and colleagues..... The introduction of PCR by Karry B Mullis and colleagues [72], which enables a DNA molecule to be amplified rapidly and specifically in vitro, has revolutionized diagnostic assays....." 6- Considering the facts about the "human microbiome", that is a cutting edge issue these days, if one uses phage display techniques in drug targeting and similar in vivo work, doesn't it change the pattern of microbiome of a healthy human and leads to other long term or even short term diseases? Thank you for the opportunity to review this very well written article.

ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 6628

Title: Phage display creates innovative applications to combat hepatitis B virus

Reviewer code: 02861260

Science editor: Ma, Ya-Juan

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Date reviewed: 2013-12-30 13:56

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input checked="" type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input checked="" type="checkbox"/> Accept
<input checked="" type="checkbox"/> Grade B (Very good)	<input type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)	language polishing	BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS TO AUTHORS

REVIEW Review of "Phage display creates innovative applications to combat hepatitis B virus" for possible publication in World Journal of Gastroenterology. **SUMMARY:** In this article, the authors have reviewed the innovative applications of phage display in epitope mapping and the development of vaccines, therapeutic agents, diagnostic reagents, as well as gene and drug delivery systems to combat HBV. This is a very interesting review article. The findings of this study will definitely contribute to scientific literature and improve our understanding the applications of phage display on HBV research.

ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 6628

Title: Phage display creates innovative applications to combat hepatitis B virus

Reviewer code: 01800545

Science editor: Ma, Ya-Juan

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Date reviewed: 2014-01-05 10:29

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input checked="" type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input checked="" type="checkbox"/> Grade B (Very good)	<input type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input checked="" type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)	language polishing	BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

COMMENTS TO AUTHORS

The authors reviewed the association between phage display and HBV. The issues about phage display were well documented. But there were many comments about HBV, which had been recognized as the common knowledge, therefore, I felt that this review was redundant. Minor comment: In Figure 2, 4, and 7, there was no new information.