

ESPS Peer-review Report
Name of Journal: World Journal of Immunology

ESPS Manuscript NO: 9988

Title: Role of host immune responses in sequence variability of HIV-1 Vpu

Reviewer code: 02612760

Science editor: Ling-Ling Wen

Date sent for review: 2014-03-10 09:11

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CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input checked="" type="checkbox"/> Accept
<input checked="" type="checkbox"/> Grade B (Very good)	<input checked="" 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 language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)		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

This is a well organized and concise minireview of HIV-1 vpu function in immune evasion and its interactions with the host machinery. The language is not perfect, but acceptable. This is a highly relevant topic as the need for anti-HIV therapeutics should be focused on disruption of host-virus interactions that contribute to viral evasion of host machinery. The authors do a nice job of summarizing and organizing the present knowledge on how vpu interacts with key host anti-viral molecules like BST-2 and CD4 as well as others. Indeed, disruption of vpu/BST-2 interactions could well represent a viable treatment route for HIV-1. This is a nice summary of the current knowledge on this and other functions of vpu. I suggest this be accepted for publication.

ESPS Peer-review Report

Name of Journal: World Journal of Immunology

ESPS Manuscript NO: 9988

Title: Role of host immune responses in sequence variability of HIV-1 Vpu

Reviewer code: 01043180

Science editor: Ling-Ling Wen

Date sent for review: 2014-03-10 09:11

Date reviewed: 2014-03-29 00:31

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input 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 language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)		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

This review summarizes recent studies on how host immune responses shape sequence and function of the HIV-1 accessory protein Vpu. This is a timely review on a relevant topic. A few aspects would benefit from some adjustments. 1) Considering that this becomes relevant at later stages of the review it would be beneficial to include already at the beginning a paragraph on the state of the art of Vpu function and to explain how Vpu has evolved in lentiviral evolution. 2) Would the anti-Vpu antibodies described in in 2.1. be expected to neutralize any of the known Vpu functions? 3) It might be relevant to mention in 3 that it is currently unclear whether any of the in vitro Vpu functions described are really relevant in vivo. 4) The mechanistic paragraph on Vpu and tetherin is not up to date. It is meanwhile well established that downregulation of tetherin from the cell surface and degradation of tetherin are not essential for Vpu antagonism of the particle release restriction. The current model rather predicts that Vpu traps tetherin during anterograde transport at the level of the TGN (note typo "TNG" instead of "TGN" in Fig. 1), with the key aspect of this effect being that tetherin does not reach membrane microdomains competent for blocking particle release. This should be corrected and the relevant literature cited. Please also modify the model presented in Fig.2 accordingly.