

Dissertation Evaluation Report

Report No.	Diploma Number: D-BIO1523	Applicant's Name	Tosin Oladipo Afowowe
Evaluators	Print name		Signature or Seal
	Chief Evaluator: <u>Yoshimasa Tanaka</u> / _____		
	Evaluator: <u>Kentaro Yoshii</u> / _____		
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<p>Evaluation Report of Dissertation</p> <p>1 . Evaluation of the research purpose. The Arenaviridae is a family of enveloped, negative-sense, RNA viruses and panarenaviral infections cause severe hemorrhagic fever. A currently available drug is ribavirin, but it elicits severe side effects. The applicant set out to establish a novel screening system using a minigenome for identifying a novel therapeutic agent with high effectiveness and low cytotoxicity. The research purpose is, therefore, appropriate.</p> <p>2 . Evaluation of the research methods. The applicant established a screening system using a minigenome. This screening system can be used under a condition of BSL-2 and facilitates drug discovery. After identification of anti-arenaviral compounds, the applicant found a possible drug target by using information technology. In addition, the applicant utilized gene manipulation to validate the drug target. The research method is, therefore, appropriate.</p> <p>3 . Evaluation of the analysis, interpretation and discussion. The applicant established a minigenome-based screening system that can be used to identify anti-panarenavirals in BSL-2 facilities. By using the screening system, the applicant identified four promising candidate compounds and found that one compound was an inhibitor of topoisomerase II. In addition, the applicant validated the drug target by employing molecular biology-based strategies. The analysis, interpretation and discussion are well structured.</p> <p>As stated above, the dissertation will greatly contribute to the identification of novel panarenaviral therapeutics and the understanding of the mechanism underlying panarenaviral infections. The evaluators uniformly agree that the dissertation is worthy of being approved for a Doctor of Philosophy in Medical Science.</p>			