Dissertation Evaluation Report

Report No.	Diploma Number: D-BIO 1646	Applicant's Name	Qiang Xu

Evaluators	Print name
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Evaluation Report of Dissertation

1. **Evaluation of the research purpose.**

Severe fever with thrombocytopenia syndrome (SFTS) is a potentially fatal emerging tick-borne disease caused by the SFTS virus (SFTSV). Besides tick bites, animal-to-human transmission of SFTSV has been reported, but little is known about SFTSV infection in cats. This study provides comprehensive information about SFTS in cats in Nagasaki and may contribute to protecting cat owners, local residents, and veterinarians from the risk of cat-transmitted SFTSV infection. We evaluated that the applicant's research purpose is appropriate.

2. **Evaluation of the research methods.**

Serum and clinical swab specimens were collected from 187 cats with suspected SFTS to identify biomarkers for SFTS diagnosis and clinical outcomes in collaboration with animal hospitals in Nagasaki between 2018 and 2024. Serological, virological, and viral genomic analyses were performed and examined for correlation with clinical outcomes and a scoring model to predict SFTSV infection was developed. We evaluated that the applicant's took adequate approach in this study.

3. **Evaluation of the analysis, interpretation and discussion.**

This study provides comprehensive data on the clinical features and laboratory parameters associated with feline SFTS. Weight gain, elevated RBC counts, AST and TBil levels are indicative of SFTSV infection, while elevated ALT, AST and serum RNA levels are associated with poor clinical outcomes. These biomarkers may facilitate the diagnosis and prognosis of SFTS in cats and could be beneficial for veterinarians to manage the disease more effectively.

As stated above, the dissertation will greatly contribute to both public health and veterinary medicine, and the evaluators uniformly agree that the dissertation is worthy of being approved for a Doctor of Philosophy in Medical Science.