ID No.	K2104
Project Title	Uterine fibroids: analyzing genetic/epigenetic effect and mediation effect of reproductive function and environmental determinants in Taiwanese and Japanese population
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Report

In this project, we aim to analyze and establish a prediction model of genetic effect and mediation effect of reproductive function and environmental determinants on uterine fibroids using biobanks of Taiwan and Japan. Our original planned activities, such as visiting IMSUT, were interrupted due to the COVID-19 pandemic. Although inconvenience and disruption of international travel caused by the COVID-19 pandemic, we held several meetings, have performed preliminary analysis, and will continue the cross-country comparison.

<Activities>

We exchanged e-mails many times for discussing the research progress. We have held three online meetings to intensively discuss the structure of data, quality control issues, the analysis methods, and the results of the GWAS analysis in Taiwan Biobank. We will continue our online meetings to discuss the interpretation of results and future publications.

<Pre><Preliminary results>

• Our preliminary analysis covers 55,653 subjects. 21% of subjects reported the diagnosis of uterine fibroids. We identified 21 SNPs associated with uterine fibroids. We further identified potential mediators in the above relationship.

<Follow-up actions>

We will continue our regular meetings to:

- · Discuss and decide whether to perform a validation analysis using another dataset or split using the existing dataset
- · Conduct a replication analysis by applying the results to another country
- · Identify key factors associated with uterine fibroids
- · Integrate findings generated from this project
- · Discuss sharing our study findings in scientific journals
- · Onsite facilities operations will be resumed after the COVID-19 pandemic