1. **No.**

   FP01812197

2. **Title**

   Effect of heat-non-burn cigarette on oxidative stress and biological metabolome

3. **Period**

   2017-2019

4. **Summary**

   It is believed that heat-not-burn smoke, which is a new device has less mainstream smoke and side stream smoke than cigarettes and has little effect on the body. However, the scientific evidence is rarely, and few studies have evaluated safety. Nobody knows exactly biological effect for the heat-not-burn product. In this study, we analyzed biological compounds by GC/MS/MS and LC/MS/MS to evaluate the effect of heat-not-burn smoke or cigarettes smoke on living body. As a result, similar to the cigarette, the heat-not-burn smoke showed a change in the low molecular weight in the living body as compared with the control group. This suggested that heat-not-burn smoke were expected to have less effect than cigarettes smoke, but would have an effect on living organisms. In the future, it is necessary to evaluate the long-term exposure of heat-not-burn smoke to biological effects and relevance to disease.